

PROGRAM EVALUATION

KENTUCKY SPECIAL AND VOCATIONAL EDUCATION PROGRAMS

Committee for Program Review & Investigation

Research Report No. 174
Legislative Research Commission
Frankfort, Kentucky

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KENTUCKY SPECIAL AND VOCATIONAL EDUCATION PROGRAMS

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Research Report No. 174

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FOREWORD

The 1978 General Assembly, in House Concurrent Resolution 67, directed the Legislative Research Commission to study and evaluate vocational education and the education programs for exceptional children in the Commonwealth. This task was assigned to the Committee for Program Review and Investigation and the results and recommendations of the study were reported to the Interim Joint Committee on Education, and the Interim Joint Committee on Appropriations and Revenue.

Invaluable assistance in completing this study was provided by Billie Downing, head of the Bureau of Education for Exceptional Children, Robert Spillman, head of the Bureau of Vocational Education, and the staff of the Interim Joint Committee on Education.

The Special Education section of this report was prepared by Linda Carroll, Brent A. Neiser and Robert Scheffel Wright. Joe Fiala authored the section on Vocational Education.

The cover of this report was designed by University of Kentucky Art Department student, John Cox.

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The Capitol
Frankfort, Kentucky
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SUMMARY

One of the major reasons for initiating the study resolution was the concern voiced by many local school officials that state financing for special and vocational education programs is inadequate. Unfortunately, the question of whether their concern is justified cannot easily be answered, because of the general inadequacy of financial accounting systems and program recordkeeping on the part of the responsible executive branch agencies.

In recent years there has been steady progress in providing educational opportunities to Kentucky's handicapped and vocational students. It is always possible to do more, however, and many of the recommendations made in this report point out areas of need and potential improvement. Many efforts are now underway at the state level to solve existing problems. Perhaps the most notable is the proposed Management Information System for the Bureau of Vocational Education.

Major points and recommendations resulting from the present study are discussed in the remainder of this summary. General areas of concern and those pertaining to handicapped children are mentioned first.

Recommendations

Accountability for dollar expenditures by program should be incorporated into the management and financial accounting and reporting structure of state and local educational institutions. If federal funds are not available to establish a program cost accounting system, state funds should be appropriated to develop and apply a system fitting Kentucky's needs.

In conjunction with the establishment of a program cost accounting system, a weighted pupil funding system test project should also be implemented. Although some local school district officials oppose such a system because of its rigorous financial accountability and increased administrative requirements, a weighted funding mechanism would help to insure that monies appropriated for special education will be expended for that purpose.

To aid local school districts in providing appropriate and comprehensive programs for handicapped children, the "Standards for Programs for Exceptional Children," referred to in 707 KAR 1:051, effective December, 1978, should be clarified and published. Although local districts are attempting to follow them, confusion and controversy regarding the intent and interpretation of the standards remain.

No major legislative action is necessary to bring Kentucky into compliance with federal Department of Education requirements or existing court orders. Comparison of state statutes and regulations with federal requirements for special education programs reveals that all major federal statutory, regulatory, and judicial mandates can be implemented within existing laws and regulations.

Aggressive and comprehensive campaigns to locate handicapped children should be continued by the Department of Education and local school districts. Without an exhaustive child find program, the number of children unserved and the adequacy of funding support will remain uncertain. Bureau of Education for Exceptional Children field staff should view their role in assisting local child find efforts as a high priority.

Local school districts should be required to submit reports documenting the extent of local financial support for education by program area. Such documentation would aid in verifying expenditures for special education; this information, in turn, would help determine guidelines for district expenditures and indicate any need for additional state funding.

The Department of Education should increase its efforts to recruit special education teachers. Perhaps the Division of Teacher Education and Certification should consider reducing or eliminating the additional course requirements applied to out-of-state special education teachers until the shortages of such teachers are eased. Fewer special education units were operated by local school districts than were allotted through the foundation program for the school years 1976 through 1979. The main reason for this shortage was the inability of districts to fill special education teacher positions.

In the area of vocational education, considerable confusion exists regarding the roles and responsibilities of the Board for Occupational Education and the Council on Higher Education relating to vocational education. Two recommendations are offered.

- An interim procedure should be established for review and approval of post-secondary and adult occupational education programs.
- The Kentucky Revised Statutes defining the relationship between the Board and the Council should be analyzed to determine whether amendments are necessary to clarify this relationship.

Useful and complete information on manpower needs is necessary for effective statewide planning. The Bureau of Vocational Education and the Board for Occupational Education should review local manpower needs assessment activities to establish guidelines for developing comprehensive and uniform manpower data and submitting it to the Kentucky Occupational Information Coordinating Committee.

Implementation of the proposed Management Information System for the Bureau of Vocational Education should receive full management support and additional state funds if necessary. This system will allow for better statewide planning by enabling timely and efficient analysis of student enrollment and related data.

The Bureau of Vocational Education should review the management approaches, organizational structures, staffing patterns and internal audit procedures used by vocational education facilities. Information from this review will be necessary to develop up-to-date procedures and a policy manual for the guidance of local facility managers and Bureau regional staff in their administrative duties.

The Department of Education and the Council on Higher Education should obtain information on expenditures for occupational programs offered by community colleges and universities. This data should be incorporated in the Department's Annual Program Plan to provide an accurate and complete view of occupational education activities in the Commonwealth and to assist the coordination and planning efforts of the Board for Occupational Education.

INTRODUCTION

The 1978 General Assembly, in House Concurrent Resolution 67, directed that a comprehensive study be made of vocational education and education programs for exceptional children in the Commonwealth. Their reason for doing so reflected a concern on the part of many local school officials that state financing for special and vocational education programs is inadequate. The study was to include but not be limited to the following:

- State and federal statutory, regulatory and judicial requirements;
- A detailed description of how services are presently being provided across the state;
- An analysis of the costs of current practices;
- An assessment of the extent need is being met; and
- An assessment of the adequacy of financing.

These concerns are addressed in the four chapters of the report, which are followed by a Conclusions section. Recommendations are made within the text of each chapter. The four chapters are entitled:

- Program Funding;
- A Review of Statutes, Regulations and Litigation Affecting Education for Exceptional Children;
- Program Needs for Exceptional Children; and
- Vocational Education in Kentucky.

The first chapter addresses both education for exceptional children and vocational education in the context of funding sources and aspects of cost. The second chapter focuses on litigation concerning education for exceptional children as well as some of the background and controversy involved. Chapter III places particular emphasis on the difficulties in locating exceptional children and their effect on determining program needs.

CHAPTER I

PROGRAM FUNDING

Kentucky's system of public elementary and secondary education is supported by a combination of local, state, and federal funds, with the major source being the state's minimum foundation program. Each school district receives an annual allotment of foundation program funds, based on the average daily attendance of the previous year. A district is entitled to one basic unit for each twenty-seven students in average daily attendance. Each foundation program unit includes an amount for teacher's salary, current expenses, and capital outlay. While state support for the teacher's salary will vary within an established range, according to the rank of the teacher, current expenses and capital outlay per unit are set by the biennial budget. Table 1 summarizes the components of each foundation program unit.

TABLE 1

COMPONENTS OF A FOUNDATION PROGRAM UNIT

Teacher Salary	Equals no less than ninety-three percent of the public school foundation program fund allotment for each rank for full-time service during the regular school year, or the allotment under KRS 157.390.
Current Expense	\$2,650 allocated for FY 1979 to cover operating costs and instructional costs other than teachers' salaries.
Capital Outlay	\$1,800 allocated for FY 1979 to cover major expenditures, such as construction costs, land purchases that are part of a building project, and payment of school bond debt service.

In addition to basic units, the foundation program also supports units for vocational education, exceptional children, and kindergarten programs. Each district also receives one unit for a superintendent and additional units for instructional supervisors, directors of pupil personnel, and administrative and special instructional services personnel. The number of units allotted to a district in the last three categories is determined by the number of classroom units each district receives. Finally, a district is eligible for additional units, referred to as growth units, if the average daily attendance in the first two months of the current school year is greater than that in the first two months of the previous year.

There are various other sources of state support for local school districts, such as power equalization and transportation funds, student fee money, funding for gifted student programs, and assistance from the School Building Authority for facility construction.

The total 1978-79 expenditure of the foundation program was \$598,221,981.63. These funds were distributed to the local education agencies through the Department of Educa-

tion's Division of Finance. Table 2 presents the statewide categorical expenditures of foundation program funds for the 1979-80 school year.

TABLE 2

FOUNDATION PROGRAM EXPENDITURES, FY 1979

Instructors' salaries	\$401,301,262
Current operating	84,384,745
Capital outlay	57,317,940
Transportation	45,187,723
Prior year adjustments	236,140
Transfer to vocational education	<u>9,794,171</u>
TOTAL	\$598,221,981

Currently special education receives slightly over \$66 million, or approximately eleven percent of the total foundation program funds, distributed in the categories outlined in Table 3.

TABLE 3

FOUNDATION PROGRAM EXPENDITURES FOR SPECIAL EDUCATION, FY 1979

Instructor's salary (average)	\$12,277
Current operating expense	2,650
Capital Outlay	1,800
Transportation (prorated)	<u>2,015</u>
Per unit allocation	\$18,742
Number units staffed	<u>x 3,527.9</u>
TOTAL	\$66,119,902

Elementary and secondary students enrolled in special education or vocational education classes are included in the average daily attendance figure used for the basic unit calculation. These same students are also considered in the allocation of the special and vocational units. Since those students attending special and vocational classes were, until 1974, included in both calculations, the district received a "bonus." This "bonus" was generally considered to be an incentive for establishing these new programs.

The practice of funding bonus units continued until 1974, when the General Assembly determined that the "bonus" funds generated by exceptional and vocational units were not being applied to those two programs. It was evident that the "bonus" was occurring,

in large part, in the basic program in the form of additional support staff and lowered pupil-teacher ratios.

The practice of funding two types of exceptional and vocational units, those allotted before 1974, which were "bonus units," and those allotted after 1974, to which was applied a deduction in average required daily attendance for purposes of calculating basic units, continued until 1978. During the 1978 session, the General Assembly authorized a deduction for all vocational and exceptional children units, with the intent of increasing the deduction until the bonus effect was entirely eliminated. For the 1979-80 school year, the deduction was increased to 8.4 for vocational units and 6.3 for exceptional children units. Since the deduction was not changed by the 1980 General Assembly, it will remain in effect through the 1981-82 school year. Table 4 illustrates the effect of the deduction on the number of basic units a hypothetical district would receive.

TABLE 4
EFFECT OF DEDUCTION ON NUMBER OF BASIC UNITS

Assumed Values	1978-79	1979-80
Average daily attendance (Includes exceptional and vocational students)	2,000	2,000
Number of exceptional children units	10	10
Exceptional children unit deduct	5.1	6.3
Number of vocational education units	8	8
Vocational education unit deduct	6.9	8.4
Computation of Basic Units		
Number of exceptional units times unit deduct	51.0	63.0
Number of vocational units times unit deduct	55.2	67.2
Total unit deduct	106.2	130.2
Average daily attendance minus total deduct	1,893.8	1,869.8
Balance of average daily attendance divided by 27 (basic unit class size)	70.14	69.3
Number of basic units before deduct (2,000 divided by 27)	74.0	74.0
Number of basic units lost	3.9	4.7

Although the deduction is intended to reflect the number of students in average daily attendance in vocational and exceptional children programs, the established value does not necessarily reflect actual attendance. While the number of students receiving services in vocational and exceptional children programs is easy to determine, movement of students between these programs and the regular programs creates a situation in which computation of a full-time

equivalent average daily attendance would require a system of student accounting which would be extremely costly and time-consuming.

In complying with the federal requirements for serving the needs of the individual student in the least restrictive environment, programs for exceptional children may be organized according to a special class plan, a resource room plan, an itinerant teacher plan, or any approved combination of the three.

The special class plan is a classroom-based program to which the student is assigned. The student may leave that classroom for certain periods to participate in regular classes to the maximum extent possible. The resource room plan requires that students be assigned to a regular classroom, in which they receive the major portion of their instruction. However, they also go to a resource room for special instruction, as specified by their individual education program. The itinerant teacher plan provides for a special teacher, such as a speech therapist, to visit several schools each week or day on an established schedule, or to conduct classes in a home or hospital when individual cases so require.

Vocational units are of two types, "contract" and "non-contract." "Non-contract" vocational units are allotted to local school districts for each vocational class offered with a minimum of ten and a maximum of twenty-seven pupils in membership [705 KAR 2:030(4)]. "Contract" vocational units are provided to support programs in state-operated vocational facilities. One contract unit is based on thirty students attending class three hours per day, five days per week [705 KAR 2:030(7)]. Twenty percent of the contract unit funds are transferred to the district owning the area vocational education center in which these classes are held, for the purpose of maintenance, bond retirement, and new construction or renovation. The Bureau of Vocational Education receives eighty percent for operation of the program, including such costs as salaries, equipment, and supplies.

Table 5 shows the average value of a regular foundation program vocational unit and the actual value of a contract vocational unit for FY 1978 and FY 1979.

TABLE 5

VALUE OF FOUNDATION PROGRAM VOCATIONAL UNITS

Type of Unit	1978	1979
All units except "contract" vocational:		
average salary*	\$10,937	\$12,602
current expenses	2,419	2,650
capital outlay	1,700	1,800
TOTAL	\$15,056	\$17,052
"Contract" vocational unit actual value	\$15,382	\$16,370

* average salary calculated from total salary paid divided by total number of units.

SOURCE: Department of Education, Division of Local School District Finance.

Salary allotments for regular vocational teachers are determined by the instructor's rank and number of years' experience. For "contract" vocational units, the salary is based on the allotment for a Rank III teacher with four to nine years' experience and one month extended employment.

As with all foundation program funds, salary allotments are restricted to payments to certified teachers [KRS 157.420(1)], and capital outlay allotments are limited in use to:

1. direct payment of construction costs;
2. bond debt service;
3. payment of lease-rental agreements for facilities that will eventually be acquired;
4. retirement of capital construction overexpenditures resulting from emergencies; and
5. a reserve fund for the above purposes [KRS 157.420(2)].

Current expense allotments are not restricted by statute or regulations; their use is at the discretion of the local school superintendent. Table 6 shows the number of foundation program vocational units for FY 1978 and 1979.

TABLE 6
FOUNDATION PROGRAM VOCATIONAL UNITS

	FY 1978		FY 1979	
	Allocated	Used	Allocated	Used
Non-Contract Units	2,027.8	1,952.9	2,130.0	2,044.6
Contract Units	646.6	606.6	650.0	598.3

Transportation costs incurred by local schools for secondary vocational students attending area or state vocational facilities are reimbursed from general fund appropriations. Actual mileage is reimbursed according to a per mile cost based on the statewide average per mile transportation costs in the previous year. The full cost of the driver is also reimbursed. Reimbursement for transportation costs amounted to \$1,070,294 in FY 1978 and \$1,339,389 in FY 1979.

While approximate calculations indicating special and vocational education program cost components are possible, the flow of funds by source into the respective school districts is impossible to determine with any degree of accuracy. All foundation program revenues are accurately accounted for, but they are a single item entry in the present accounting system. Only capital outlay allocations and expenditures are entered separately. With all revenues listed under one account number, it is impossible to distinguish special education and vocational education allotments from those of the regular program.

It must be emphasized that in order for a unit to be funded, there must be a teacher, students, classroom space, and an appropriate program. It is safe to assume that funds earmarked for special and vocational education teachers' salaries flow directly to them. However, current expense allocations and expenditures are not distinguished between programs. This amount approaches \$10 million in revenue that should be used to support special and vocational education, but this figure cannot be confirmed. Finally, transportation allocations and expenditures are not accounted for by program.

Funding of State-Operated Vocational Facilities

State general fund appropriations are determined by the Kentucky General Assembly on the basis of agency budget requests and the Governor's recommendations. The General Fund is the primary support for state-operated vocational facilities. Kentucky residents who are full-time and part-time adult students in the area and state facilities are also charged an initial registration fee of five dollars and a tuition fee of four dollars per month. Secondary students are not assessed fees. Non-residents are charged \$20 initial registration and \$40 per month tuition.

In FY 1977, monthly dormitory fees ranged from \$20 to \$80 and in 1978 from \$30 to \$80. In FY 1979, the Board for Occupational Education raised dormitory fees to \$80 per month for all facilities. Additional agency receipts are generated from vending machines and miscellaneous sales, the latter including food sales, book sales, supply sales, and live-work fees of two dollars per project. Also reported in this category are funds received from the Foundation Program, CETA agencies, and the Veterans Administration.

Federal Fund Sources for Exceptional Children

Federal funds were awarded under the following grant titles during FY 1979 to districts providing services to exceptional children.

Public Law 94-142-EHA-B	\$8,000,000
Public Law 93-380-Title IV-C	319,000
Public Law 89-313-Title I	1,204,471

Children who are counted for P.L. 94-142 funds may not be counted for funding purposes under P.L. 89-313. Identification of children eligible for P.L. 89-313 funds (children returning to the system from state institutions) is the responsibility of the local school districts. However, school districts are not always aware of a child's previous receipt of services from a state institution.

The Department for Human Resources records these students' enrollment in state institutions and submits a list to the Kentucky Department of Education, Division of Compensatory Education. That office distributes the list to each school district. It is then the responsibility of the district to confirm the pupils' enrollment in that district. If a school official is aware of a child returning to the public system from a state institution, it is his responsibility to submit that name to the Department of Education, which in turn notifies the Department for Human Resources. Although this process is well outlined it is not always carried out efficiently. Problems arise when school officials do not consult the listing of eligible children, or they fail to notify the Department of Education of a child's return to the public schools.

This procedure is important because funds allotted under P.L. 89-313 are significantly higher per child than those available through P.L. 94-142. Under P.L. 89-313, a district may receive \$499 per eligible student for FY 1980, whereas P.L. 94-142 provided \$179.67 and P.L. 93-380 provided \$5.33, or a total of only \$185 per student. Many of the smaller school districts choose not to apply for these funds because of increased paperwork. The school district must

develop a "project" for each source of funding; and if only one or two pupils are eligible for P.L. 89-313 funds, districts may prefer not to apply.

The Bureau of Education for Exceptional Children conducts annual workshops for school officials on how to apply for funds under P.L. 94-142, for children counted as of December 1. In addition, state officials conduct a child count survey on October 1 to identify children eligible for P.L. 89-313 funds. Over one hundred school districts now receive P.L. 89-313 funds, but the Kentucky Department of Education reports that many school districts have eligible students who are missed in the surveys.

A Child Tracking System, when fully implemented by the Bureau of Education for Exceptional Children, will alleviate the problem of locating pupils. The system will trace a pupil from one educational institution to another and distinguish those who should be counted under P.L. 94-142 from those counted under P.L. 89-313. School district officials may still need encouragement to apply for funds, however.

Federal Funding Sources for Vocational Students

In FY 1978, under P.L. 94-482, Kentucky received federal vocational funds of slightly over \$10.5 million, or approximately fourteen percent of the total Kentucky expenditures for vocational education. Federal appropriations are allocated to each state on the basis of the ratio of that state's per capita income and population 15-65 years of age to the national per capita income and population 15-65 years of age. Federal law requires that distribution of federal funds be based upon a formula involving seven major criteria: (1) manpower needs and job opportunities; (2) concentration of low income individuals; (3) relative financial ability to provide educational resources; (4) relative costs of programs, services and activities; (5) rates of school dropouts and non-attending school population; (6) relative number of handicapped persons; and (7) areas of economic depression.

Local Sources

Local School officials have pointed out that there are additional program costs above the level of state and federal allocations. These include supplements for teacher salaries, small equipment and supply purchases, and student activity funds, which must be paid with local revenue. In FY 1979, statewide tax effort for local school systems equaled \$197,713,484. Review of the respective local tax efforts of the 181 school districts in Kentucky reveals a wide disparity of effort, even among districts of similar size. Although officials have attested to their local financial effort devoted to special education, expenditures cannot be verified by the present accounting system.

Similarly, local school districts must submit estimates of their contribution to a vocational education instructor's salary. Although the accuracy of this information is not verified, local schools must certify to the relative accuracy of these expenditures. These reported salary expenditures by vocational program and source of funds are presented in Table 7. For FY 1978 the reported total was \$25,639,524 and for FY 1979 the total was \$30,723,411. The local contributions for FY 1978 amounted to 10.5 percent of total expenditures; in FY 1979 the local con-

tribution was 9.4 percent. This indicates that state contribution for vocational education teachers' salaries rose from 89.5 percent in FY 1978 to 90.6 percent in FY 1979.

Determining Per Pupil Cost

Financial accounting and reporting methods currently in use for school districts emphasizes dollar accountability. The current methods used to account for appropriations and expenditures allow for fund accounting by source, amount and object of expenditure. The accounting and reporting systems do not provide adequate information for program accountability nor for appropriations and expenditures for basic, special and vocational "contract" and "non-contract" programs.

Presently the Division of Finance in the Department of Education separately calculates and reports the number of foundation program units allocated for basic, special, and vocational units. However, the actual dollar amounts attributable to each of these types of units is not reported. To have program accountability, it is necessary to report the amount of dollars flowing into the local schools for each type of unit.

Program accountability weaknesses are present in local school accounting and reporting procedures as well. In attempting to acquire data on local school expenditures for equipment, supplies, operating costs, administration, and support services, it became apparent that the financial accounting system used by local schools is not organized to provide such data. Teachers' salaries can be linked to a particular educational program area but must be prorated for teachers with responsibilities in several programs. The current accounting system does not identify by program expenditures for supplies, equipment, utilities or maintenance.

TABLE 7
LOCAL SCHOOL DISTRICTS SALARY EXPENDITURES
FOR VOCATIONAL EDUCATION
COMMONWEALTH OF KENTUCKY
FY 1978 - FY 1979

PROGRAM	1978			
	FOUNDA- TION UNITS ^a	TOTAL SALARY	PAID FROM FOUNDATION PROGRAM	PAID BY LOCAL DISTRICT
Agribusiness	287.0	\$ 4,104,279.32	\$ 3,917,445.40	\$ 186,833.92
Business & Office	424.3	5,302,049.49	4,726,704.70	575,344.79
Disadvantaged	75.8	1,082,918.55	930,795.00	152,123.55
Distributive Education	133.7	1,858,787.56	1,692,768.40	166,019.16
Handicapped	34.1	486,701.30	434,456.40	52,244.90
Health Occupations	22.0	317,489.51	251,390.50	66,099.01
Home Economics (Gainful)				
Home Economics (Non-Gainful)	571.7 ^b	7,285,244.09	6,740,191.00	545,053.09
Industrial Education (Level II)	34.1	408,545.80	353,809.80	54,736.00
Practical Arts	234.6	2,546,925.42	2,353,314.80	193,610.62
Public Service	.6	6,363.00	5,802.00	561.00
Trades & Industry	135.0	2,240,220.00	1,529,653.80	710,566.20
TOTAL	1952.9	\$25,639,524.04	\$22,936,331.80	\$ 2,703,192.24

Table 7
Continued

PROGRAM	1979			
	FOUNDATIONS UNITS ^a	TOTAL SALARY	PAID FROM FOUNDATION PROGRAM	PAID BY LOCAL DISTRICT
Agribusiness	277.5	\$ 4,580,911.03	\$ 4,408,761.80	\$ 172,149.23
Business & Office	439.8	6,369,626.49	5,717,770.45	651,856.04
Disadvantaged	75.5	1,196,375.81	1,025,948.40	170,427.41
Distributive Education	125.1	2,021,259.50	1,831,021.20	190,238.30
Handicapped	42.1	666,167.13	603,953.50	62,213.63
Health Occupations	21.6	368,503.60	309,789.00	58,714.60
Home Economics (Gainful)		589,245.41	515,797.50	73,447.91
Home Economics (Non-Gainful)	552.6 ^b	7,425,655.52	6,966,713.90	458,941.62
Industrial Education (Level II)	85.8	1,171,086.80	1,018,286.00	152,800.80
Practical Arts	277.1	3,468,448.66	3,231,579.50	236,869.16
Public Service	1.1	56,475.33	43,556.10	12,919.43
Trades & Industry	147.5	2,809,655.63	2,160,974.00	648,681.63
TOTAL	2045.7	\$30,723,411.11	\$27,834,151.35	\$ 2,889,259.76

SOURCE: Bureau of Vocational Education.

^aNon-contract units only.

^bRepresents combined gainful and non-gainful programs.

Cost Accounting Systems

Changes are occurring rapidly in the development of educational programs. Pressure for accountability is increasing for all responsible agencies. This accountability must satisfy a number of objectives, not the least of which is a complete and accurate financial picture, in proper form and on a timely basis, to the persons and agencies responsible for and concerned with the operations of government.

Recognizing the limitations of the current educational accounting system, researchers studied alternate accounting systems which incorporate the accountability features previously discussed. One such system is an accounting system developed by Robert Davis and Associates, under contract with the U.S. Department of Health, Education and Welfare, National Center for Education Statistics. Their approach specifies a system of people, equipment, forms, methods and procedures organized to record financial activity and to display that activity in financial reports. A primary purpose of this accounting system, known as Handbook II, is to produce financial information applicable to a variety of needs. The criteria of the handbook are as follows:

1. The chart of accounts should encourage full disclosure of the school district. Emphasis should be placed during training and budget development on the accurate classification of financial transactions. Expenditures should be recorded in the accounting categories applicable, regardless of the implications of some of those decisions.
2. Comprehensiveness of financial reporting. All financial activities of the LSD should be incorporated into a single accounting and reporting system for full disclosure. The account classifications in this handbook encourage this procedure. Accounts for such activities as food services, student activities, community services and commercial enterprises all should be included in the financial reports of the LSD.
3. Simplified reporting. HEW's published Government Accounting and Financial Reporting principles encourage use of the minimum number of funds necessary for legal and operational use. Only the minimum number of funds consistent with legal and operating requirements should be established, since unnecessary funds result in inflexibility, undue complexity, and inefficient financial administration. Many think that readers of the LSD's financial statements are aided through consolidation of funds and better organization of the reports.
4. Financial reporting should emphasize the results of LSD operations more than the resources applied. The account code structure emphasizes program accounting and the application of supporting service costs to the "products" of the educational enterprises.
5. Flexibility to meet the needs of both small and large LSD's while retaining comparability of reported data. A minimum list of accounts essential for federal reporting is provided and a variety of optional classifications is included in the handbook for use by those LSD's interested in a more comprehensive approach to financial accounting and reporting.
6. The classification of accounts and the recommended reporting structure should remain in accordance with generally accepted accounting principles.

These criteria are central to the design and application of the handbook account classification structure. At the present time, there is no federal money available to aid states in

establishing a program cost accounting system. An appropriation is pending but has not yet been approved.

Handbook II has been developed for use in Kentucky. It was tested in the Paducah area with about eight surrounding counties participating. That test was unsuccessful—for the following reasons:

1. Department of Education personnel did not successfully monitor the beginning stages of implementation. Travel time between Frankfort and Paducah was a basic problem.
2. Districts were experiencing processing delays in their financial reports and in payroll. December reports were not received until February.
3. Computer setup was the primary reason for these delays. District needs received low priority for system processing time. Data was entered on the regional system and reports were generated at the Bureau of Computer Services, Frankfort.
4. Time was not allotted for district personnel to familiarize themselves with computer terminals.
5. The accounting system could not be operated manually.
6. Funds for this pilot study were so limited that it was impossible to attempt a second pilot project to eliminate problems previously mentioned.

Alternate accounting systems exist, or could be developed specifically for Kentucky, which would provide the financial data needed to calculate the cost per pupil, by program type, for any special, vocational or regular education program, if sufficient staff and funds were available.

Program Cost Analyses in Other States

Many program cost analyses have been conducted in the past ten years on the cost of special, vocational, and regular classes. Increased state and federal legislation mandating education of exceptional children shows that this is a primary concern of legislators. Education programs cannot be considered adequate simply because equal amounts are allocated per pupil. Students in different programs have different needs. Some twenty states have begun to define these needs, establish cost accounting systems to evaluate expenditures, and develop "weighted pupil formulas." These formulas have been extremely successful in other states where funding is allocated on a per pupil basis. A brief survey of weighted pupil methods and cost analysis systems used by two other states follows.

Utah

Utah has developed weighted pupil formulas in four significant areas: small schools, special education, vocational education, and staffing costs. The first category, small schools, is the most significant for the purposes of this study. In dealing with special education, Utah's policymakers realized the vast differences across their state in the distribution of the special education population and the number of districts which could afford to meet the mandates of P.L. 94-142. Consequently, they chose to distribute half of the special education appropriation according to the weightings and half according to the proportionate size of the exceptional student population in each district.

New Mexico

This system incorporates pupil weights, program weights, and instructional staff weights. The aspect of this system which is most relevant for Kentucky is the size adjustment factors. New Mexico is largely rural; it has eighty-eight school districts with an average daily attendance off under 1,000 students. Small schools must operate with a smaller pupil/teacher ratio and these ratios are a significant cost factor. New Mexico had previously operated with a funding system similar to Kentucky's bonus unit. The New Mexico Legislature felt the weighting system equalized program funding sufficiently. The practice of including exceptional children in total average daily attendance, which was the same as the duplicate count used in Kentucky's calculations, was discontinued.

Kentucky

In 1974, the General Assembly enacted a weighted pupil funding system, which was initiated during the 1975-76 school year. This system was repealed by the 1976 General Assembly.

Recent proposals are leading Kentucky toward another pilot project with a weighted pupil funding system. This system is based on the assumptions that pupil needs vary and that the cost of educating these students will vary accordingly.

The weighting system has the potential to be successful, but it must be emphasized that the benefits of this funding mechanism could not be realized under the present accounting system used by the Kentucky State Department of Education. Further, since 1974, certain aspects of a pupil weighting system have met with opposition. Interviews have determined that the main obstacles to its adoption have been a fear of strict financial accountability and increased paperwork. This opposition, should it continue, could block the adoption of any new accounting system or weighted pupil funding formula. The following are some of the positive and negative aspects of a weighted pupil funding system.

Positive Points

1. Each child's funding is based upon his or her time spent in each program. This method produces a more equitable distribution of funding.
2. Calculating classroom size of twenty-seven and proportionate ASIS (Administrative and Special Instructional Services) units would no longer be necessary.
3. Funds will follow pupils directly to the programs they participate in.

Negative Points

1. District recordkeeping increases.
2. Districts lose flexibility in expenditure practices.
3. Full-time equivalency data must be calculated and maintained on all children.

CHAPTER II

A REVIEW OF STATUTES, REGULATIONS AND LITIGATION AFFECTING EDUCATION FOR EXCEPTIONAL CHILDREN

As early as 1879 Congress recognized the need for federal intervention in providing educational programs for people with handicapping conditions, enacting legislation to promote the education of the blind. However, in 1970, nearly one hundred years later, certain handicapped children were commonly excluded from public schools on the grounds that they could not benefit from an education or that specialized educational programs were not available. During the seventies, dramatic changes in the law governing services for the handicapped occurred; these important developments began in 1971, through federal and state court decisions, proposed legislative amendments, and administrative regulations.

In 1954 the United States Supreme Court, in *Brown v. Board of Education* (347 U.S. 483), ruled that the opportunity for an education “ . . . where the state has undertaken to provide it, is a right which must be made available to all on equal terms.” The establishment of that right for children of minority races was used successfully in two landmark federal cases to challenge the practice of excluding handicapped children from public schools.

In *Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania*, 334 F. Supp. 1257 (E.D. PA. 1971), it was determined that the state had an obligation to provide an appropriate program of education and training to mentally retarded children. The following year the same guarantees were applied to children with all types of handicaps in *Mills v. Board of Education*, 348 F. Supp. 866 (D.D.C. 1972). The successful conclusions in the *PARC* and *Mills* cases were soon followed by thirty-six right-to-education decisions in twenty-seven states.

Early Special Education Legislation

Prior to 1947, Kentucky had no statewide planning for special education programs. The few programs which did exist had been established by the local districts, which received only the per capita state funding.

In February, 1947, the Department of Education employed the first full-time supervisor to study the problem of education for children with physical and mental handicaps. Although she was employed by the Department of Education, the total cost of this supervisory position was paid for a period of seventeen months by a Kentucky Society for Crippled Children grant to the Department of Education.

Special Education Act of 1948

In January, 1948, the Kentucky General Assembly passed the Special Education Act, which for the first time pointed out the responsibility of the state to provide instruction and educational programs for handicapped children. The Act required that programs be provided for physically handicapped and educable mentally handicapped children between the ages of

three and twenty-one. Physically handicapped was defined to include all handicapping conditions, such as deafness, orthopedic impairment, epilepsy, special health problems, partial sight, cerebral palsy and speech defects.

The Act also required that a Division of Special Education with one professional staff member be established in the Bureau of Instruction in the Department of Education. In 1950, funds for a second staff member were provided by a grant from the Kentucky Society for Crippled Children. This position was later included in the state budget. This pattern of obtaining additional staff was followed several times during the early history of the Division.

Reimbursement Policy 1948-1954

The Act of 1948 appropriated \$70,000 for the purpose of administering the law and reimbursing local school districts for the balance of the 1947-48 fiscal year and fiscal years 1948-49 and 1949-50. The Act provided that local school districts be reimbursed for the excess per capita cost for each handicapped child over the ascertained per capital cost for normal children.

The appropriation remained at \$70,000 per biennium until July, 1953. Because it was not sufficient to pay all excess costs as described in the Act, those teachers' salaries which could be identified as a direct cost of the special education programs were the only expenses for which a district could be reimbursed. However, even salaries could not be fully reimbursed with the limited state funds.

As the total excess cost of special education programs increased from year to year, districts became more reluctant to participate in the program, on the grounds that funds were insufficient to compensate for the time and effort spent in requesting reimbursement. The lack of financial support discouraged development of instruction designed to meet the educational need of handicapped children.

1956 Amendment to Special Education Act

In response to pressure from parent interest groups to further define the obligation of the Commonwealth for the education of its handicapped children, the 1956 Kentucky General Assembly amended the 1948 Special Education Act to include "trainable" mentally retarded children. At the same time, the law was amended to allow for the instruction of physically handicapped children between the ages of five and twenty-one years rather than between the ages of three and twenty-one.

1962 Amendment to Special Education Act

The 1962 General Assembly again amended the special education statutes by defining "exceptional children" as "children who differ or deviate from the average or normal children in physical, mental, emotional or social characteristics and abilities to the extent that they require specialized education in order to attain the maximum of their abilities and capacities" [KRS 156.200].

At the same time, three- and four-year-old physically handicapped children were again included under the law, as were the six to twenty-one-year-old mentally handicapped.

Foundation Program Law—1954-1968

New impetus was given to the initiation and development of programs for exceptional children with the passage of the foundation program law in 1954. This law, KRS 157.360, provided that:

In allotting classroom units for special instructional services for exceptional children, one classroom unit shall be included for each teacher approved to teach such children in accordance with the provisions of law and regulations of the State Board of Education.

The foundation program law included provisions to guarantee that districts would not receive less funding under the new formula than they had received under the per capita distribution. However, no provision was made for classroom units that were smaller than average and significantly more expensive to maintain.

The 1960 General Assembly attempted to address that question through an amendment to the foundation program law. However, wording of the amendment resulted in an interpretation which caused a hardship for some districts. The statutes were amended again in 1964 to eliminate that hardship.

1970 Legislation

The Budget Bill passed by the 1970 General Assembly provided no additional classroom units for teachers of exceptional children for the 1970-72 biennium. The allotment remained at the 1969-70 level of 1,060 classroom units for all special education programs funded under the foundation program. Table 8 shows the number of classroom units allotted for exceptional children between the 1955-56 and 1971-72 school years.

House Bill 256, passed during the 1970 session of the General Assembly, established an eleven-member State Task Force of the Human Resource Coordinating Commission to study the needs and resources available for special education, training, and related services for exceptional children in the Commonwealth. Membership of the Task Force was to include "one person involved in the training of exceptional children, one person from the Department of Education, and nine other citizens of the Commonwealth."

The statute also provided for the establishment of regional task forces to "assist the State Task Force in ascertaining needs, evaluating resources, and recommending plans for statewide programs for exceptional children." As a means of expediting the work of the task force, Educational Management Services of Minneapolis, Minnesota, was employed to conduct a statewide survey to identify the needs of exceptional children, as well as to evaluate possible resources for meeting these needs.

In the final report to the Governor in October, 1971, the State Task Force on Exceptional Children made the following broad recommendations:

1. Insure equal access to and benefit from appropriate public school programs for all exceptional children;
2. Improve the quantity and quality of related services to exceptional children; and

3. Efficiently use existing and future structures at all levels of government to coordinate and integrate delivery of services to exceptional children.

To meet the specific recommendation "to insure that all exceptional children be permitted equal access to and benefit from appropriate public school programs," the Task Force proposed two amendments to the foundation program:

1. That certain changes be made in the foundation program to allow for a self-generating formula for the allotment of classroom units for teachers of exceptional children, rather than depending on a specific appropriation from the Legislature for each biennium.

2. That two new sections be added to the foundation program law to provide for the allotment of exceptional children classroom units for trained personnel other than teachers, thereby expanding the scope of special education to include more than merely additional self-contained special classes.

To improve the quality of planning and coordination, the Task Force also recommended that the General Assembly establish a Bureau of Education for Exceptional Children within the Department of Education for the purpose of supervising and directing state programs for the education of exceptional children.

The 1970 legislation also provided that "by July 1, 1974, all county and independent boards of education shall operate special education programs to the extent required by and pursuant to a plan which has been approved by the State Board of Education after consideration of the recommendations from the State Task Force and the Human Resource Coordinating Commission and Council. If any county or independent board of education has failed to operate and implement special education programs in accordance with the aforesaid plans, the application of said county or independent board of education for minimum foundation program payments may be considered insufficient."

The State Board of Education approved the following regulation to implement the legislation. "The State Board of Education authorizes the Superintendent of Public Instruction to develop procedures for the implementation of KRS 157.224. The procedures shall include guidelines for local school districts to follow in the development of five year plans for the provision of comprehensive educational programs for exceptional children for the period of July 1, 1974, to June 30, 1979. The Superintendent of Public Instruction shall submit such plans to the State Board of Education for approval no later than March, 1974."

A subcommittee of the Advisory Council on Programs for Exceptional Children, established by the Superintendent of Public Instruction, developed a five-year planning document to be completed by each local school district. The staff of the Division of Special Education conducted a series of regional meetings in 1973 to assist local districts in completing the planning document. Each district submitted a plan for approval by the State Board of Education for the 1974-75 school year.

TABLE 8

GROWTH OF CLASSROOM UNITS FOR EXCEPTIONAL CHILDREN
COMMONWEALTH OF KENTUCKY

Year	Home and/or Hospital Instruction			Physically Handicapped	Learning Disabled	Visually Handicapped	Speech Handicapped	Hearing Handicapped		Mentally Handicapped		Emotionally Disturbed	Multiple Handicapped	Teacher Aides	Total
	Home Instruction	Hospital Instruction	Home & Hospital Instruction					Hard of Hearing	Deaf	Educable	Trainable				
1955-56	29.3	8.5		12.0		10.0	9.5	2.0	5.5	22.5					93.3
1956-57	27.1	6.0		10.5		9.6	9.3	2.0	7.0	39.5	2.5				113.5
1957-58	32.4	6.0		9.5		10.0	12.2	2.0	6.0	46.0	5.0				129.1
1958-59	39.0	4.5		9.2		10.0	14.2	2.0	7.0	56.6	8.5				150.9
1959-60	48.6	2.7		9.0		9.0	16.2	2.0	7.0	76.7	7.0				178.2
1960-61	52.9	2.5		9.0		8.8	26.4	.5	8.0	96.9	10.0				215.0
1961-62	67.5	2.5		9.0		8.7	24.1		6.0	111.6	15.9				245.3
1962-63	83.8	2.5	3.9	9.0		9.0	32.1	3.5	6.0	150.3	21.0				321.1
1963-64	88.0	2.5	4.0	10.0	4.0	8.0	45.8	5.0	6.0	195.6	30.5				399.4
1964-65	89.0	3.0	3.0	10.0	4.0	7.0	47.5	5.0	6.0	216.0	33.5				424.0
1965-66	79.9	2.5	15.0	9.0	4.5	7.0	54.5	6.0	6.0	272.2	42.1				498.7
1966-67	83.9	3.5	11.0	10.0	7.0	5.0	51.5	6.0	6.0	315.1	49.0				548.0
1967-68	83.6	3.5	14.0	11.5	9.8	5.4	62.2	7.0	7.5	380.5	70.9	1.0			656.9
1968-69	86.2	3.0	17.0	12.5	18.0	5.3	85.9	5.0	6.7	454.5	82.9	2.0			779.0
1969-70	99.3	3.0	16.5	13.0	34.3	3.3	115.6	9.6	8.8	626.8	105.0	9.8			1045.0

(cont.)

Table 8 , page 2

Year	Home and/or Hospital Instruction			Physically Handicapped	Learning Disabled	Visually Handicapped	Speech Handicapped	Hearing ^d Handicapped		Mentally Handicapped		Emotionally Disturbed	Multiple Handicapped ^g	Teacher Aides ^h	Total
	Home Instruction	Hospital Instruction	Home & Hospital Instruction					Hard of Hearing	Deaf	Educable	Trainable ^e				
1970-71	94.4	3.0	19.6	13.6	49.6	4.3	113.3	6.0	13.0	622.1	104.0	10.0			1052.9
1971-72	91.3	3.0	17.6	10.6	53.3	4.3	110.2	6.0	13.6	627.6	106.6	13.0			1057.4
1972-73	105.84	3.0	8.0	12.22	65.58	5.0	150.33	7.56	14.86	704.3	116.8	16.4			1210.0
1973-74	105.1	2.0	16.5	14.4	96.3	6.0	179.2		20.5	770.2	123.5	24.9			1359.9
1974-75	114.0	6.0	45.2	14.0	284.3	9.7	261.6	261.6	30.1	1056.5	190.5	59.9		12.9	2057.4
1975-76	138.7	4.0	37.3	18.9	440.5	9.5	319.9	44.1		1172.1	254.4	94.7		55.3	2580.4
1976-77	153.4		65.0	18.5	604.8	14.5	372.5	54.4		1274.7	308.8	149.6	15.5		3031.7
1977-78	176.7	8.0	53.6	19.8	712.6	14.2	406.1	56.0		1295.5	309.3	184.9	30.5		3266.2
1978-79	174.4	5.0	61.1	17.8	851.5	21.2	432.3	62.1		1317.9	328.0	206.8	52.0		3530.1

SOURCE:

- a In 1963, the State Board of Education approved criteria for the establishment of programs for the learning disabled (labeled neurologically impaired at the time). Prior to the 1963-64 school year no programs could be established using state funds.
- b Prior to 1975-76 units for the visually handicapped were allotted as either programs for the partially sighted or programs for the blind. 1974-75 school year was the only year a unit for the blind was allotted.
- c Speech handicapped refers to speech and/or language handicapped.
- d Since 1975-76 units for the hard-of-hearing and/or deaf have been allotted as units for the hearing impaired.
- e In 1956, the Special Education Act was amended to include classes for the trainable mentally handicapped.
- f In 1967, the State Board of Education approved criteria for the establishment of programs for the emotionally disturbed. The first programs in the public schools were established during the 1967-68 school year.
- g In 1975, the State Board of Education approved criteria for the establishment of programs for the multiple handicapped. During the 1976-77 school year the first programs were established in the public schools.
- h This was an experimental program authorized by KRS 390.

1972 Amendment to Foundation Program

In 1972, the General Assembly responded to the Task Force recommendation for a self-generating formula for classroom units by passing Senate Bill 103, which amended KRS 157.360 to allow classroom units for special instructional services for exceptional children to be allotted for each approved teacher employed.

Pursuant to that Act, local school district superintendents applied for and staffed 386 new classroom units for exceptional children for the 1972-73 school year. However, the 1972-74 budget bill contained an appropriation for only 150 new classroom units for teachers of exceptional children for each year of the biennium. On August 2, 1972, the Commissioner of Finance ruled that the budget bill took precedence over Senate Bill 103.

Due to the conflict between the provisions of these two pieces of legislation, the Department of Education arrived at a prorating formula for allotting the 150 units. The formula provided that each new unit staffed would receive state funds for one-half the unit cost, with the remaining half to be funded through federal or local sources.

Litigation

In September, 1973, a coalition of six groups concerned about the education of exceptional children filed suit in the United States District Court for the Eastern District of Kentucky against the Kentucky State Board of Education, et al. The suit, on behalf of all of Kentucky's exceptional children, charged that Kentucky had failed to establish "a comprehensive system of public education for the classes of children" named in the complaint, and asked the federal court to:

1. Declare that Kentucky's schools be required to accept all children, "regardless of their physical, mental or emotional condition and to provide for each child . . . such education or training that is suitable for his needs, capacities and capabilities."
2. Declare unconstitutional a Kentucky statute that exempts from compulsory attendance those children "whose physical or mental condition prevents or renders inadvisable attendance at school" and those "who are deaf or blind to an extent that renders them incapable of receiving instruction in the regular elementary or secondary schools."
3. Declare that the Kentucky School for the Blind in Louisville and the Kentucky School for the Deaf in Danville are insufficient to meet the needs of all such students in the state.
4. Declare that no child may be excluded from a regular school program on the ground that he or she is "emotionally disturbed" or "immature."

The suit asked the court to order state education officials to draft a statewide special education plan within thirty days of a judicial order and that all districts be required to participate during the 1974-75 school year, as a condition of receiving state funds.

The suit also requested that local districts be required to establish procedures to identify special education children and for a full hearing and review of the status of any child assigned to a special education program.

The suit was settled under a consent agreement which provided that:

1. All Kentucky children of compulsory school age have the right to a public education.

2. Exceptional children, as defined in KRS 157.200, who are of compulsory school age, have the right to education and related training suitable to their needs, capacities, and capabilities.

3. The absence of a special education program in a local school district suitable to the needs, capacities, and capabilities of an exceptional child, or a determination that an exceptional child may not benefit from the regular program of education in that district is not, in itself and without consideration of any other factor, a ground for exclusion of such a child from the public school systems of the Commonwealth.

4. Where there is probable cause to believe that an exceptional child may benefit from an established and existing educational program within a local school district, that child must be provided an opportunity to participate in such a program. Exclusion of an exceptional child from the local school district by referring that child to a regional or statewide residential facility should occur only where it is neither reasonable nor practical to educate him at the local level.

5. Inclusion in the public education system is of such fundamental importance to exceptional children as to require that certain basic safeguards be invoked when a child is excluded from the public education system.

6. The defendants should insure that all exceptional children of compulsory school age be provided a public education through the following:

(a) Use of all lawful and reasonable means to see that existing statutes, regulations, and the consent agreement are fully and equally enforced throughout the Commonwealth.

(b) Continued evaluation of the five-year plans for special education submitted by local school districts and establishment of guidelines for the continued supervision, direction and guidance of all local school districts in the Commonwealth in implementing the laws and regulations of the Commonwealth, five-year plans, and the consent agreement.

(c) Exercising, where appropriate, the authority to withhold minimum foundation funds from a local school district which does not make a reasonable, good faith effort to provide for the educational needs of exceptional children in accordance with an approved five-year plan of that local district.

(d) Establishing, by regulation, procedures and guidelines pursuant to which all local school districts in the Commonwealth shall commence and/or continue identification of exceptional children residing in such districts, who are otherwise eligible for attendance in the public education system but who are not attending a program of the local district. Defendants shall also establish, by regulation, procedures by which local school districts shall (1) notify the parents of children so identified of their right to receive education from the public schools sufficient to their needs under the laws of the Commonwealth and the terms of this consent agreement and (2) forward a copy of a report of such identification and notification to the defendant (the Kentucky State Board of Education).

(e) Establishing, by regulation, procedures by which each exceptional child for whom there is no existing local regular or special program, or who is otherwise excluded from a local school system, shall receive a hearing in regard to that child's educational opportunities under the laws of the Commonwealth and the regulations of the Kentucky State Board of Education.

Such a hearing shall be conducted on an informal basis and shall consist of notification to the parents and an opportunity for them to appear before the appropriate local school authorities with respect to such exclusion. At that hearing, information shall be furnished to the parents concerning all available programs suitable to the needs, capacities, and capabilities of the child so advised and the responsibilities of the local school district with regard thereto. A written report on the hearing along with a statement as to determinations made in regard to the further education of such a child should be forwarded to the State Board of Education.

(f) Adopting a regulation establishing an appeals procedure within the Department of Education for appeals by a parent of an exceptional child for whom no local regular or special program has been provided, in order to coordinate various special education programs which may be available to the child outside the local school district. The regulation should direct the state superintendent of public instruction to designate an individual or individuals within the Department of Education to hear such appeals. Such procedure should be structured to guarantee that said appeal may be prosecuted in a minimum amount of time.

(g) Continuing to direct and require that each school district comply with the regulations and guidelines promulgated by the defendants relative to the education of exceptional children.

1974 Legislation

In response to one of the charges in the suit, the 1974 General Assembly passed House Bill 40, amending KRS 159.030 to delete the section making it permissible to exempt deaf or blind children from school. This amendment also made homebound instruction mandatory, rather than permissive, for any exceptional child who is excluded from school.

As a companion bill to House Bill 40, the General Assembly passed House Bill 240, permitting homebound services for all exceptional children unable to be accommodated in a classroom. Homebound services were previously available for physically handicapped children only.

Another amendment to KRS 157.280 provided that if the number of children of compulsory school age in one classification of exceptionality in a district is not sufficient to justify a special education program for that exceptionality in that district, or if a school district does not provide a special education program for that exceptionality, the board shall provide a program by contract with another county or independent district or private organization that maintains a special education program for that exceptionality approved by the State Board of Education.

The 1974 General Assembly also changed the definition of exceptional children to delete the intellectually gifted and the functionally retarded.

. . . These children include, but are not limited to, those children hereafter described in this section as well as the neurologically impaired, visually impaired, hearing impaired, the emotionally disturbed, the retarded, children with learning disabilities, communications disorders and those children who are multiple handicapped (KRS 157.200).

Budgetary Provisions for 1974-1976 Biennium

Three significant pieces of legislation relating to funding of special education programs were passed by the 1974 General Assembly:

1. The biennial budget bill included eleven hundred additional classroom units for exceptional children for the 1974-76 biennium. The units were again funded as a line item in the budget, designating five hundred additional units for the 1974-75 school year and six hundred additional units for the 1975-76 school year.

2. The formula for calculating the foundation program basic unit allocation was changed to allow a deduction from average daily attendance for pupils enrolled in new vocational or exceptional classroom units allotted after July 1, 1974. The amount to be deducted was to be established by State Board of Education regulations. This "bonus unit" deduction is explained more fully in Chapter I. A new section was added to the law to provide a special transportation funding "weight" for handicapped pupils for whom a local school district provided a special type of transportation.

3. Senate Bill 280 established a new section of KRS Chapter 157A to permit the conversion from the classroom unit funding approach to the weighted pupil unit concept. The legislation provided for weights for age levels of pupils and "add-on weights" for some categories of exceptional children to be calculated on a full-time equivalency formula. The law did not provide for significant aspects of resource and itinerant programs for exceptional children, such as planning and coordination with regular classroom teachers, parents, and agencies, and travel time for teachers of itinerant programs.

Federal Legislation

During the same period of time that the Commonwealth of Kentucky was involved in improving the statutory and financial base for special education programs, three pieces of federal legislation were passed which together established a federal standard by which state and local educational programs for handicapped children are measured.

Rehabilitation Act of 1973

In September, 1973, Congress passed Section 504 of the Rehabilitation Act, which prohibits discrimination on the basis of physical or mental handicap in any federally-assisted program or activity. "No otherwise qualified handicapped individual in the United States . . . shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

In April, 1977, the final 504 regulations were issued in a form that would insure that the basic requirements for education programs would parallel P.L. 94-142, the amendments to the Education of the Handicapped Act.

Education of the Handicapped Act

In 1974 (P.L. 93-380), and again in 1975 (P.L. 94-142), Part B of the Education of the Handicapped Act was amended to insert additional requirements for states wishing to receive funding through the Act. The amendments of 1975, Public Law 94-142, are also known as the Education for All Handicapped Children Act. P.L. 94-142 is based on a number of Congressional findings, or understandings:

- There were more than eight million handicapped children in the United States and more than half of the handicapped children were not receiving appropriate educational services;
- One million of the handicapped children in the United States were excluded entirely from the public school system and were unable to go through the education process with their peers;
- There were many handicapped children participating in regular school programs whose handicaps were undetected;
- Because of the lack of adequate services within the public school system, families were often forced to find services outside the public school system, often at great distance from their residence and at their expense.

Public law 94-142 addresses these concerns and defines handicapped children as mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, orthopedically impaired, other health impaired, deaf-blind, multi-handicapped, or having specific learning disabilities.

The law is complemented by Section 504 of the Rehabilitation Act of 1973. P.L. 94-142 addresses itself to the educational need of handicapped individuals, while Section 504 deals with the physical accessibility of buildings and public programs to the handicapped. Section 504 is designed to eliminate discrimination on the basis of handicap in any program or activity receiving federal financial assistance. Section 504 represents the first federal civil rights law protecting the rights of handicapped persons and reflects a national commitment to end discrimination on the basis of handicap. Both federal acts work toward effectively integrating handicapped individuals into the mainstream of American life.

Requirements of P.L. 94-142

P.L. 94-142 is basically funding legislation to assist the states in providing a free appropriate public education. To receive funding the states are required to establish policies and procedures in their state program plan which will insure compliance with the requirements of P.L. 94-142. The law requires policies and procedures to insure that:

1. All handicapped children have the opportunity of a free appropriate public education;
2. A state has a goal of providing a full educational opportunity to all handicapped children with a detailed timetable for accomplishing such a goal and a description of the kind and number of facilities, personnel, and services necessary throughout the state to meet such a goal;
3. A state has established priorities for providing first, a free appropriate public education to all handicapped children who are not receiving any education; and second, for

providing programs for those children with the most severe handicaps who are receiving an inadequate education.

4. All handicapped children residing in the state are identified, located, and evaluated, and that a practical method is developed and implemented to determine which children are receiving appropriate services and which are not;

5. Each local education agency in the state will maintain records of the individualized education program (IEP) of each handicapped child and that the IEP is implemented and reviewed at least annually;

6. A state has established due process procedures for handicapped children and their parents;

7. A state has established procedures to insure that to the maximum extent appropriate handicapped children are educated with children who are not handicapped, in the least restrictive environment;

8. A state has established procedures to insure that testing and evaluation materials and procedures utilized for the purposes of evaluation and placement of handicapped children will be selected and administered so as not to be racially or culturally discriminatory;

9. A state will describe programs and procedures for the development and implementation of a comprehensive system of personnel development, including the inservice training of general and special education instructional and support personnel;

10. Provision is made for handicapped children enrolled in private schools to participate in special education programs carried out under Part B of the Act;

11. Handicapped children in private schools and facilities will be provided special education and related services at no cost to their parents or guardians, if such children are placed in or referred to such schools or facilities by the state or local school district;

12. P.L. 94-142 funds made available to agencies on the basis of erroneously classified children can be recovered;

13. Before a local school district's application is disapproved, the district will be provided reasonable notice and an opportunity for a hearing;

14. The effectiveness of programs (including IEP's) in meeting the educational needs of handicapped children is evaluated;

15. The confidentiality of any personally identifiable data, information, and records collected or maintained by the state and local educational agencies is maintained.

Requirements of the Consent Agreement

Though not as specific as P.L. 94-142, the consent agreement resulting from the suit by the Kentucky Association of Retarded Children (hereinafter referred to as the consent agreement) included the same requirements, with the exception of a state plan, confidentiality of pupil records, an individual educational program and pupil evaluation. However, the IEP and pupil evaluations are implied since they are necessary to fulfill the requirement that handicapped children receive an education and related training suitable to their needs.

To evaluate the appropriateness of Kentucky's statutes, regulations, and policies regarding educational programs for handicapped children, it is necessary to examine them in

terms of the requirements of Section 504 of the Rehabilitation Act, P.L. 94-142, and the consent agreement, to make sure that they provide legal authority for personnel to enforce the requirements.

Table 9 identifies the requirements of the federal laws and the consent agreement and specifies the Kentucky Revised Statutes, Kentucky Administrative Regulations, and other types of controls which have been established to insure that the authority exists to implement programs which provide full educational opportunities for handicapped pupils.

Right to a Free, Appropriate Public Education

P.L. 94-142 requires that the state have in effect a policy providing all handicapped children access to a free, appropriate public education. The consent agreement established this right for handicapped Kentucky children and required the State Department of Education "to use all lawful and reasonable means to insure that statutes, regulations and this consent agreement are fully and equally enforced," in order that education and related training suitable to individual needs, capabilities and capacities be provided for each handicapped child. The Kentucky Revised Statutes also establish the right to a free, appropriate education for handicapped children, who are defined there as " . . . persons under twenty-one years of age who differ in one or more respects from average or normal children in physical, mental, learning, emotional or social characteristics and abilities to such a degree that they need special educational programs or services for them to benefit maximally from the regular or usual facilities or educational programs of the public schools" The definition includes children who have a physical or mental handicap, multiple handicap, a communication disorder, emotional disturbance, or a specific learning disability (KRS 157.200).

The right to an education is also provided in other statutes:

"The Commonwealth of Kentucky is committed to providing a comprehensive educational program for its exceptional school age children" (KRS 157.224).

"School boards of any school district subject to the provisions of KRS 157.200 to 157.280, shall establish and maintain special educational programs for exceptional children" (KRS 157.230).

The Kentucky Annual Program Plan for the administration of Part B of the Education of All Handicapped Children Act, approved by the State Board of Elementary and Secondary Education, and incorporated by reference in Kentucky Administrative Regulations (707 KAR 1:003), reaffirms Kentucky's commitment to providing a free, appropriate public education to all exceptional children ages five through seventeen. All children and youth who are handicapped and who are eligible for special education services shall have access to a free, appropriate public education, as that term is defined by P.L. 94-142, the consent agreement, and Kentucky Administrative Regulations regarding eligibility for placement. The educational services shall be suited to each child's individual needs, including the provision of special education and related services, and shall be provided regardless of the severity of the child's mental, physical or emotional disability or impairment.

P.L. 94-142 requires that each Annual Program Plan set forth detailed policies and procedures to insure that "there is established (i) a goal of providing full educational op-

TABLE 9

STATE AND FEDERAL AUTHORITY FOR PROGRAM IMPLEMENTATION

Section 504*	P.L. 94-142*	Consent Agreement	Kentucky Revised Statutes	Kentucky Administrative Regulations	Plans, Policies, Guidelines
1. Right to free, appropriate edu- cation	X	X	KRS 157.200, 157.224, 157.230, 157.280	707 KAR 1:003	APP*
2. Goal and time lines for full services	X				APP
3. Priorities for expenditure of funds		X			APP
4. Local planning		X	KRS 157.224		
5. Child identification	X	X	KRS 157.260	707 KAR 1:051	APP, Standards, Tracking System
6. Individual educational program (IEP)	X			707 KAR 1:051 1:070, 1:060	APP
7. Due process procedures	X	X		707 KAR 1:060, 1:051	APP
8. Least restrictive environment	X	X		707 KAR 1:051	APP
9. Non-discriminatory testing	X	X		707 KAR 1:051, 1:060 1:052-1:059, 1:041	APP
10. Confidentiality of records		X		707 KAR 1:051	APP
11. Comprehensive system of personnel development		X			APP
12. Private school participation		X		707 KAR 1:051	Ky. Constitution (Section 189), APP, OAG 74-331, OAG 74-660, OAG 74-914, OAG 75-639
13. Free education in private schools	X	X	KRS 157.280, 157.360	707 KAR 1:051, 1:070	APP
14. Recovery of misappropriated federal funds		X	KRS 156.210		APP

Section 504*	P.L. 94-142*	Consent Agreement	Kentucky Revised Statutes	Kentucky Administrative Regulations	Plans, Policies, Guidelines
15. Withholding of foundation program funds		X	KRS 157.224		
16. Hearing process for federal fund recipient	X	X			APP
17. Program evaluation		X	KRS 157.221		APP

* Some requirements may be in federal regulations rather than in Section 504 or P. L. 94-142

** Kentucky Annual Program Plan for the administration of Part B of the Education of All Handicapped Children Act, approved by the State Board of Elementary & Secondary Education and incorporated by reference in 707 KAR 1:003

SOURCE: Section 504, Federal Rehabilitation Act;
P.L. 94-142

Consent Agreement between Kentucky Association for Retarded Children and Kentucky
State Board of Education, November, 1974.
Kentucky Administrative Regulations;
Kentucky Annual Program Plan (APP), 707 KAR 1:003.

portunity to all handicapped children, (ii) a detailed timetable for accomplishing such a goal, and (iii) a description of the kind and number of facilities, personnel, and services necessary throughout the state to meet such a goal . . . ” Kentucky’s Annual Program Plan establishes a goal of identifying and serving children who were of school age by September 1, 1978, and all exceptional children under twenty-one years of age by 1990. Activities designed to assist the local school districts and other agencies to achieve the goal are detailed in the state plan and include personnel training and recruitment, technical assistance on services and facilities, and program monitoring and evaluation.

Kentucky’s fiscal priorities as set forth in the plan are:

- First, the needs of all exceptional children ages five through seventeen who are not receiving any educational services.
- Second, the needs of exceptional children within each disability, with the most severe handicaps, who are receiving an inadequate education.
- Third, the goal of providing full educational opportunity to all exceptional children ages birth through twenty-one.

Regulations for the implementation of P.L. 94-142 require that local school districts submit an application for funds which includes assurances and procedures for fulfilling the requirements of the law, as well as detailed budgets for the expenditures of funds. Applications are submitted annually and reviewed and approved by the Department of Education. Hearing procedures are established in the event that a local school district application is not approved. This application has replaced the “Five-Year Plan” and fulfills the planning requirements of KRS 157.224.

Major Requirements for Educational Programs

The major requirements which most directly affect the educational program for each individual child are:

- child counting, location and assessment
- individual educational programs
- due process procedures
- the “least restrictive environment”
- non-discriminatory testing
- confidentiality of records

The director of pupil personnel in each local school district is required by KRS 157.260 to conduct an annual census of handicapped children and report to the Department of Education. The other requirements listed above are not mentioned in statutes but are contained in administrative regulations. Title 707 KAR 1:051, effective December, 1978, requires that “Local school boards of education shall operate programs for exceptional children of school attendance age pursuant to KRS 157.200 to KRS 157.305 inclusive, the criteria listed in this chapter and “Standards for Programs for Exceptional Children.”

The 1981-1983 Annual Program Plan amendment contains the following statements about the standards:

Kentucky Administrative Regulation 707 KAR 1:051, Section 2, requires local school district personnel to continue the identification of exceptional children residing in their school district. Standards are being developed pursuant to 707 KAR 1:051 which specify procedures relative to comprehensive child identification, location and evaluation. These standards are incorporated by reference into Kentucky Administrative Regulations and, upon approval, will have the force of regulation. While the Kentucky Administrative Regulations set forth the state requirements related to the carrying out of P.L. 94-142, the standards will provide additional clarification of procedures to be followed.

Although for more than a year local school districts have been required by regulation to follow the standards referred to in the regulation and state plan, such standards need to be clarified.

Non-Public School Programs

Each district is required to establish a district-wide Admissions and Release Committee and a school-based Admissions and Release Committee to insure the most appropriate placement of each child. The Admissions and Release Committee first determines if a child needs placement. They also conduct annual reviews of the program. During the course of any review it may be decided to release a child from a program.

If it is determined through the Admissions and Release Committee process that a handicapped child can best be served in a private or parochial school, then such a placement must be at no cost to the parents. Legislative authority for such placement is found in KRS 157.280, and a funding mechanism to assist the local school districts is provided in KRS 157.360, which allows the district to continue to count the child in average daily attendance for foundation program unit allocation. Regulations specify the requirements which private schools must meet before they can receive Department of Education approval as a placement site for handicapped children.

P.L. 94-142 also requires that handicapped children enrolled in non-public schools be provided the opportunity to receive special education and related services offered by public schools with funds generated by the Act. Since Kentucky's Constitution prohibits the use of funds raised by taxes for educational purposes to aid parochial schools, several opinions of the Attorney General have declared that private school children who participate in public school system programs must do so through a dual enrollment plan. The Annual Program Plan establishes policies and procedures to insure that private and parochial school handicapped children who wish to participate in the public school programs have the opportunity to do so.

Comprehensive System of Personnel Development

The Education of the Handicapped Act requires that each state plan shall include the following:

a description of programs and procedures for (a) the development and implementation of a comprehensive system of personnel development which shall include the inservice training of general and special educational instructional and support personnel, detailed procedures to assure that all personnel necessary to carry out the purposes of the Act are appropriately and adequately prepared and trained, and effective procedures for acquiring and disseminating to teachers and administrators of programs for handicapped children significant information derived from educational research, demonstration, and similar projects and (b) adopting, where appropriate, promising educational practices and materials developed through such projects.

Kentucky's state plan specifies detailed procedures and activities to be conducted to meet this requirement. A Committee for the Comprehensive System of Personnel Development has been developed to coordinate preservice training in the institutions of higher education, inservice training and acquisition and dissemination of specialized information.

Monitoring of Funds

P.L. 94-142 requires that states establish policies and procedures for the recovery of federal funds made available to agencies on the basis of child count figures which have been proven to be too high, as a result of misclassification. The consent agreement also requires the Department of Education to exercise its authority under KRS 157.224 to withhold funds from a local school district which does not make a reasonable, good faith effort to provide an appropriate educational program for its exceptional children. In the event it is determined that a school district has misused funds, the Superintendent of Public Instruction may invoke civil action against the district, under the authority of KRS 156.210.

Program Evaluation

P.L. 94-142 and the consent agreement require that programs for exceptional children be monitored and evaluated. KRS 157.221 establishes the authority and responsibility of the Bureau of Education for Exceptional Children to supervise and direct the Commonwealth's educational program for exceptional children. The Annual Program Plan describes the Bureau's monitoring and evaluation system for determining the effectiveness of the program.

Summary

During the 1970-71 school year only 1,053 units of handicapped children were enrolled in special education programs in Kentucky's public schools. Many handicapped were excluded, either because of lack of teachers or funds, or because of the severity of their handicap. Only ten years later, a short time in educational systems, every school age handicapped child not only has the opportunity to be admitted to school but can also expect and insist on an appropriate

educational program designed to meet his individual educational needs. This change may well be the most rapid and most dramatic change in Kentucky's educational history.

Since 1970, the legislature of the Commonwealth of Kentucky has strengthened its commitment to educational programs for exceptional children. From the 1972-73 to the 1979-80 school year, classroom units for exceptional children have increased from 1,210 to 3,744. Other financial commitments may be seen in the provision for funds, funds to assist out-of-district children, funds to send deaf-blind children to appropriate programs out-of-state, and funding for state personnel to administer the state programs and assist local school districts.

State statutes and regulations have been enacted to provide the legal authority for the Department of Education and the local school systems to implement the requirements of the federal laws and regulations and the consent agreement. Comparison of state statutes and regulations with the requirements of the federal government and the courts reveals that every major requirement can be implemented within the existing statutes and regulations, even though some are vague and open to a variety of interpretations at the program implementation level.

There remains, however, some controversy over the regulation which, since 1978, has required local school districts to operate programs according to a document entitled "Standards for Programs for Exceptional Children," which has not been completed and published.

Recommendation

This document should be made available to local school district personnel or the regulation should be amended to delete the requirement.

CHAPTER III

PROGRAM NEEDS FOR EXCEPTIONAL CHILDREN

Kentucky's public education system is committed to insuring that all exceptional children receive a free, appropriate education. This chapter assesses the degree to which handicapped children are located, identified, evaluated, placed and counted. Also provided is an estimate of the number of additional special education units Kentucky needs.

Various terms are commonly used in describing the processes by which a child is determined to be handicapped and is placed in an appropriate educational program. "Location" refers to the initial identification of a child as possibly having a handicapping condition. A child may be located by a teacher, parent, doctor or health officer, or by virtually anyone else. A located child is referred to special education teachers, counselors, psychologists, and medical and other personnel to determine whether he or she has a handicapping condition. When a child is determined to have a handicapping condition or conditions, he or she is said to be "identified." After being identified, a child is "evaluated" to determine what educational services and other treatment programs and related services will be most effective in providing a free, appropriate education. Finally, when an exceptional child's individual education plan (IEP) is developed in accord with the evaluation, the child is "placed" in the appropriate classroom and other programs, assuming such facilities are available. This is the "placement" process. The term "counted" refers to the periodic census type enumerations of handicapped children made for funding and unit determination purposes.

The following chapter is divided into five major sections.

- Locating and Counting Exceptional Children
- Estimated Number of Children Served and Unserved
- Forecasting Program Needs
- Evaluation of Child Identification Efforts
- Problems in Serving All Exceptional Children

The first section describes existing programs and activities aimed at locating and counting exceptional children receiving or needing services. The second section presents data on children served and unserved and estimates additional program needs and costs. The third section briefly addresses problems of forecasting program needs. In section four, child identification efforts of the local school districts and the Bureau of Education for Exceptional Children are evaluated by comparing numbers of children identified to estimates derived from national incidence rates. These efforts are also measured against criteria of reasonableness and sufficiency. The chapter concludes with a discussion of the difficulties in providing appropriate educational services to all handicapped students.

Locating and Counting Exceptional Children

Several programs and formal activities are designed to locate and count exceptional children in Kentucky. These include the child count required by the Education for the Handicapped Act, the child count required by the Elementary and Secondary Education Act of

1965, the annual reports and applications for continued federal funding submitted at the end of each school year by the school districts, and local district reports submitted each October to the Bureau of Education for Exceptional Children for foundation program unit verification purposes.

Child Count for the Education for the Handicapped Act

A non-duplicative count of exceptional children served by funds provided through the Education for the Handicapped Act is made each December 1 by the Department of Education. The count includes handicapped children identified and placed in public and non-public schools and other agencies by the local school districts. Services furnished by private schools or other agencies are provided under contract with the district. The count includes children aged three through twenty-one, but there are so few pre-school programs that the number of three and four-year-olds counted is small.¹ The December 1, 1978, child count showed 60,375 children receiving services under this Act.

Child Count for the Elementary and Secondary Education Act

On October 1 each year, a non-duplicative count is made by local school districts of exceptional children receiving services pursuant to Public Law 89-313, the Elementary and Secondary Education Act of 1965. This is a count of handicapped children up to the age of twenty-one who are served through programs operated by state agencies other than the Department of Education. Included in this count are children served in the state residential facilities at Oakwood, Outwood and Hazelwood; in the Kentucky School for the Blind and the Kentucky School for the Deaf; and through the comprehensive care centers. Because of extreme difficulties in locating and identifying pre-school exceptional children, few are reported in this count. The October 1, 1978, count reported 2,600 students of all ages receiving services through these facilities.

School District Reports

At the end of each school year, all districts serving handicapped children with funds provided by the Education for the Handicapped Act must report the actual number of children served that year, identified by handicapping condition. Children who have been evaluated as needing some type of service but who are not being served are also included. For school year 1977-78, a total of 70,417 handicapped children were reported. In 1978-79, 63,808 were reported.

Another report which provides information on the number of students served is submitted annually by October 15 by all school districts. This is a report on classroom units and includes information on the teacher, the type of unit served, and the age and number of pupils in the unit. Verification that allotted units are being properly operated is accomplished through the school district reports.

The number of students reported on these documents for school year 1977-78 exceeded 85,000. However, the reports are duplicative. Students receiving services for more than one exceptionality are included in the count for each exceptionality. A mentally handicapped student receiving speech therapy, for example, will be counted twice.

The primary responsibility of locating, identifying, evaluating, and serving handicapped children falls to the local school districts. The Bureau of Education for Exceptional Children monitors the local districts' efforts to implement and carry out appropriate child find activities, coordinates such efforts across the state, and undertakes appropriate statewide identification campaigns and programs.

Costs of Child Find Systems

Cost involved in locating children needing services can only be estimated. The Bureau of Education for Exceptional Children has one full-time professional employee assigned to child find duties, at an annual salary of \$16,056. One school district has a full-time coordinator for that purpose. All other districts have part-time coordinators, administrators who are expected to devote only twenty-five percent of their time to child find activities.

Table 10 gives the estimated annual costs of the child find program, based on the following assumptions regarding costs:

1. State coordinator salary of \$16,056.
2. District coordinators at 1979 average instructor's salary of \$12,277.
3. Fringe benefits and overhead at 22 percent of salaries.
4. Advertisements, posters, brochures, displays, and other materials at \$50,000.

TABLE 10

ESTIMATED ANNUAL COSTS OF CHILD FIND PROGRAM

State Coordinator (\$16,056 x 1.22)	\$ 19,588
Clerical and travel	7,600
District Coordinators:	
1 full-time (\$12,277 x 1.22)	14,978
180 part-time (\$12,277 x .25 x 1.22 x 180)	674,007
Advertising and Materials	50,000
Total Annual Costs	<u><u>\$766,173</u></u>

Difficulties in Locating Exceptional Children

Several circumstances inhibit locating exceptional children needing services. Those outside regular school age who are not known to the school system may simply be overlooked. Certain handicaps are not always apparent and may not be discovered even by active child find efforts. Finally, there are probably isolated cases of school age children who are not enrolled in school and are unknown to the proper authorities.

It is even difficult to count all children who are identified and served by the various components of the state's education and social services systems. In addition to public school programs, exceptional children receive services from accredited and non-accredited private schools, residential care facilities, vocational education and vocational rehabilitation schools and facilities, the Kentucky School for the Blind, the Kentucky School for the Deaf, and the state correctional institutions. Exceptional children in many private accredited schools are

counted by local school districts. However, children in other accredited and non-accredited private schools may not be included, depending on the schools' willingness to cooperate with the Bureau or local school district. Exceptional children in facilities operated by the Department for Human Resources should be counted as part of the local school district count, but Bureau personnel are not certain whether they have been consistently included in the past.

The Bureau of Vocational Education and the Bureau of Rehabilitation Services also serve handicapped children. School districts offer vocational programs to exceptional students. Exceptional children in vocational education programs for secondary students are included in the local school district child count. Vocational education programs are provided in high schools, area vocational education centers, state vocational technical schools, universities and community colleges. Children above the age of seventeen who leave the public schools and enroll in vocational programs at other facilities may not be counted. As of July, 1979, correctional institutions were providing education to thirty-seven exceptional children under age twenty-one.

Estimated Number of Children Served and Unserved

To evaluate the degree to which the needs of Kentucky's exceptional children are satisfied, the number of students reported as served is compared to estimates of those needing services. Two such estimates are derived from different incidence rates published by the U. S. Office of Special Education, formerly the Bureau of Education for the Handicapped. That office has estimated national incidence rates for handicapping conditions on four occasions, in 1968, 1970, 1974 and 1976. At least seven other studies since 1954 have developed similar incidence rates. The studies through 1970 reported total incidence rates between 8.69 percent and 10.70 percent of the school age population outside institutions. The four studies since 1973 reported rates ranging from 10.94 percent to 12.38 percent. The Office of Special Education currently uses the twelve percent rate to determine each state's maximum allowable funding for the education of exceptional children under P.L. 94-142.

The handicapping condition incidence rates developed at the national level are questionable, however. In the 1977-78 school year, the percentage of school age children receiving services in the fifty states, as reported by the National Office of Special Education, ranged from 5.2 percent to 11.5 percent, with an average of 7.4 percent.² According to the report, Kentucky provided special education services to 7.4 percent of its school age population. This estimate was based on Bureau of Census population projections. If estimates are computed from population data developed by the University of Louisville's Urban Studies Center, however, Kentucky provided appropriate special education services to 8.2 percent of its school age children during that year.

Some general problems are inherent in any endeavor to develop national incidence rates. The sample may be biased, or samples taken from a few states may not be applicable to others. Subsequent use of rates based on these samples to estimate national incidence or incidence in other states may thus be invalid and inaccurate.

In 1978, a report by SRI International for the Office of the Assistant Secretary of Education of the U. S. Department of Health, Education and Welfare pointed out the lack of standardized national data on exceptional children. States use different criteria for defining

handicaps, making certain comparisons between states meaningless. The SRI report suggested that "twelve percent may be too low (or too high) to meet the legislative intent to serve all children in need of special education services."

For the above reasons, these incidence rates must be used with great caution in projecting program needs. Although the two sets of incidence rates discussed earlier provide only broad estimates of the actual number of children needing services, they are the best indicators available and are used in this report to estimate a range of the number needing services.

Applying the federal incidence rates to Kentucky's school age population provides estimates of children needing services. Comparing these figures to the number of children receiving services (as reported in the year end reports) yields estimates of additional exceptional children needing special education services. Table 11 compares children served with estimated children eligible for services for school years 1977-78 and 1978-79. The data indicate that Kentucky is serving more mentally handicapped children than predicted by the national incidence rates, and approximately the expected number of speech impaired children. Children served for emotional disturbances, learning disabilities, and other handicaps are fewer than projected by the national rates. The only substantial change in children served from 1977-78 to 1978-79 was a twenty-three percent increase in learning disabled students.

Estimated Additional Program Needs and Costs

Additional special education program needs for 1978-79 may be estimated from the data developed in Table 11. The difference between the number served and the estimated number needing services yields an approximation of those still needing services in each category of disability. The number of children who can be adequately served through one classroom unit depends on the type of handicapping condition. For example, a teacher of speech therapy can work with many more children in a day than can a teacher of the emotionally disturbed. By dividing the estimates of those not being served by the 1979 average enrollment per unit for the different categories, the number of additional units needed can be obtained. Applying the 1979 average cost per special education unit of \$18,742 provides estimated additional program costs.

Table 12 presents the estimated number of children needing services above those already served, the number of units required to serve them, and the costs of those extra units. Between 1,943 and 2,651 additional units may be necessary. The cost of providing the units at 1979 rates would range from \$36,415,706 to \$49,685,042. If the estimates are correct, the greatest need is for additional units to serve emotionally disturbed and learning disabled children.

Estimated additional program costs for children already identified but not receiving services and those inadequately served are calculated in the same way. Table 13 summarizes additional program needs and costs for these children. One hundred twenty-five new units would be needed at an approximate 1979 cost of \$2,342,750 per year.

TABLE 11
EXCEPTIONAL CHILDREN RECEIVING FULL EDUCATIONAL SERVICES IN KENTUCKY
SCHOOL YEARS 1977-79

HANDICAPPING CONDITION	ESTIMATED INCIDENCE RATE	1977-78			1978-79			ESTIMATED NUMBER NEEDING SERVICES, 1979
		REPORTED INCIDENCE	ESTIMATED INCIDENCE ^a	ESTIMATED ^b INCIDENCE	REPORTED INCIDENCE	ESTIMATED ^a INCIDENCE	ESTIMATED ^b INCIDENCE	
Mentally Handicapped	2.3%	21,684	16,680	16,680	21,697	16,390	16,390	0
Emotionally Disturbed	2.0%	2,043	14,505	14,505	1,798	14,252	14,252	12,454
Learning Disabled	3.0% ^a , 1.0% ^b	9,523	21,757	7,252	11,675	21,378	7,126	0-9,703
Speech Impaired	3.5%	22,210	25,383	25,383	22,537	24,941	24,941	2,404
Other Conditions	1.24%	4,037	8,993	8,993	4,037	8,836	8,836	4,799
TOTAL		59,497	87,318	72,813	61,744	85,797	71,545	19,657 to 29,360

SOURCE: Reported incidence figures were obtained from summary data compiled from year end reports and funding applications submitted by local school districts to the Department of Education; the summary data were provided by the Department. Estimates of those needing services were derived by applying national incidence rates to estimated school age population data obtained from the Urban Studies Center, University of Louisville.

^aDerived from estimated rates developed in 1976 by the U.S. Bureau of Education for the Handicapped, cited in Studies of Handicapped Students, Vol. II (Research Report EPRC 4537-11), SRI International, Menlo Park, California, 1978, page 3. These rates are representative of four post-1973 studies cited in the report.

^bDerived from estimated rates developed in 1968 by the U.S. Bureau of Education for the Handicapped, cited in Studies of Handicapped Students, Vol. II, These rates are representative of seven pre-1972 studies.

TABLE 12

ESTIMATED NUMBER OF EXCEPTIONAL CHILDREN NOT RECEIVING SERVICES,
ADDITIONAL UNITS REQUIRED, AND ADDITIONAL COSTS, BY HANDICAPPING CONDITION,
COMMONWEALTH OF KENTUCKY, SCHOOL YEAR 1978-79

HANDICAPPING CONDITION ^a	ESTIMATED CHILDREN NEEDING SERVICES	NUMBER OF ADDITIONAL UNITS REQUIRED	COST OF ADDITIONAL UNITS ^b
Mentally Handicapped (13.2)	0	0	0
Emotionally Disturbed (8.7)	12,454	1,431	\$26,819,802
Learning Disabled (13.7)	0 to 9,703	0 to 708	0 to 13,269,336
Speech Impaired (52.1)	2,404	46	862,132
Other Conditions (10.3)	4,799	466	8,733,772
TOTAL ALL HANDICAPPING CONDITIONS	19,657 to 29,360	1,943 to 2,651	\$36,715,706 to \$49,685,042

SOURCE: Summary data compiled from year end reports and funding applications submitted by local school districts to the Department of Education; the summary data were provided by the Bureau. Estimates of those needing services were derived by applying national incidence rates to estimated school age population projected by the Urban Studies Center, University of Louisville.

^aAssumed average number of children in a unit is given in parentheses after each handicapping condition.

^bUnit cost is assumed to be \$18,742, the average cost per unit for Kentucky special education units in school year 1978-1979.

TABLE 13

ADDITIONAL UNITS AND COSTS REQUIRED TO SERVE EXCEPTIONAL CHILDREN
IDENTIFIED AS INADEQUATELY SERVED,
COMMONWEALTH OF KENTUCKY, SCHOOL YEAR 1978-79

HANDICAPPING CONDITION ^a	CHILDREN NEEDING SERVICES ^b	NUMBER OF EXTRA UNITS REQUIRED	COST OF EXTRA UNITS ^c
Mentally Handicapped (13.2)	477	36	\$ 674,712
Emotionally Disturbed (8.7)	131	15	281,130
Learning Disabled (13.7)	656	48	899,616
Speech Impaired (52.1)	644	12	224,904
Other Conditions (10.3)	148	14	262,388
TOTAL ALL CONDITIONS	2,059	125	\$2,342,750

SOURCE: Summary data compiled from year end reports and funding applications submitted by local school districts to the Department of Education; the summary data were provided by the Bureau.

^a Assumed average number of children in a unit is given in parentheses after each handicapping condition.

^b Number of children either (1) receiving no educational services or (2) receiving an education but in need of additional special education and related services, as reported on the annual Part B reports and funding applications.

^c Unit cost is assumed to be \$18,742, the average cost per unit for Kentucky special education units in school year 1979.

Forecasting Program Needs

In light of the problems of counting exceptional children, the potential weakness of the estimated incidence rates, and the absence of better predictors, Kentucky's educational system faces a difficult task in forecasting program needs. Incompleteness of available data on exceptional children already served and possible reporting errors compound the difficulties. Uncertainty as to how many exceptional children there are in Kentucky and how many will be identified in any time period complicates the tasks of forecasting and budgeting.

Better, more complete information on identified exceptional children can be developed and maintained by integrating existing data and eliminating duplication. Toward this end, the Bureau of Education for Exceptional Children Information System (BEECIS), also referred to as the "Child Tracking System," was initiated in school year 1979-80. While it is presently designed for children already in approved special education programs, the Bureau plans to expand it to include exceptional children at any stage of the identification evaluation, and placement processes and in any program or facility from which data can be obtained.

The BEECIS System presently collects and maintains the following information on each handicapped student in the pilot districts.

1. Demographic data, including name, birthdate, sex, race and school district of residence.
2. School and grade assignment.
3. Pupil's use of special or regular transportation.
4. Federal funding source; i.e., Title I of the Elementary and Secondary Education Act, or Part B of the Education for the Handicapped Act.
5. Whether the child receives special education through a special education unit funded by the Foundation Program.
6. Primary handicapping condition.
7. Date referred for diagnosis and evaluation, and date on which diagnosis and evaluation were completed.
8. Programs and services recommended.
9. Programs and services provided, including nature, frequency, location, teacher, and beginning and ending dates.

The BEECIS Child Tracking System will facilitate program planning and budgeting by maintaining more complete, current and accessible information on identified handicapped children. It should provide the following additional benefits.

1. Reduction of local school reporting requirements.
2. Comprehensive accounting of services received by each child.
3. Tracking of children who move from one district to another or to and from a state residential facility.
4. Compilation of full-time equivalent attendance data, which would permit more accurate special education cost analyses.

Evaluation of Child Identification Efforts

Two approaches may be taken to evaluating the child identification efforts of the Bureau of Education for Exceptional Children and Kentucky's local school districts. The first is to compare the number of children identified to estimates derived from national incidence rates. The second is to review location, identification and counting procedures and activities in order to determine whether these efforts are reasonable, appropriate and sufficient.

The 1970 estimated national incidence rate for all handicapping conditions was 10.04 percent; the 1976 rate was 12.04 percent. The difference in the two rates resulted from an increase in the estimated incidence of specific learning disabilities, from 1.0 percent in 1970 to 3.0 percent in 1976. The component rates for each handicapping condition are given in Table 14. Application of these to Kentucky's 1978 population aged six to seventeen indicates that there were between 72,800 and 87,300 children needing special education services in the 1977-78 school year. Subtracting the number of identified children reported by the Bureau from this figure indicates that roughly 2,400 to 16,900 children remained unidentified that year. The same analysis for the 1978-79 school year produces an estimate of 71,500 to 85,800 children needing special education in that year. Of these, approximately 7,700 to 22,000 were not identified.

Table 14 summarizes this data for each handicapping condition. For example, the third row shows that 11,886 children in school year 1977-78 were identified as having specific learning disabilities. The 1976 estimated national incidence of learning disabilities, 3.0 percent, indicates that there were 21,757 children aged six through seventeen in this category; the 1970 rate, 1.0 percent, indicates that there were only 7,252 such children. Similar figures are observed for school year 1978-79. Applying these two figures, either most of Kentucky's school age children with specific learning disabilities have been identified, or as many as 10,000 may remain unidentified. However, neither conclusion can be wholly supported because of doubts about the incidence rates and because of difficulties in locating and understanding these handicaps. Specific learning disabilities are sometimes difficult to detect. Definitions and severity of disability vary widely.

There are many more predicted than reported in the emotionally disturbed category. On the other hand, greater numbers of mentally handicapped children were counted in both years than were estimated by the incidence rate of 2.3 percent. The projected number of speech impaired children and the number actually served were approximately the same.

The annual reports showed that 9.71 percent of the school age population was identified as handicapped in 1978 and 8.95 percent in 1979. The number declined by about 6,600 from 1978 to 1979, which was in part attributable to a decrease in school age population from 725,232 to 712,604. A substantial number of students became eighteen that year. The number of persons aged eighteen to twenty-one who were served increased from 2,042 in 1977-78 to 5,329 in 1978-79. The drop in the rate of reported identification may also have resulted from changes in reporting at the local level. Table 14 does not include some exceptional children who are receiving services from other agencies. Those in private schools, certain vocational education programs and correctional facilities may not have been reported.

TABLE 14

REPORTED IDENTIFIED HANDICAPPED CHILDREN AGES 6-17
VS.
ESTIMATED INCIDENCE, BY HANDICAPPING CONDITION,

HANDICAPPING CONDITION	ESTIMATED INCIDENCE RATE	1977 - 1978		1978 - 1979		ESTIMATE ^b ESTIMATE ^b	ESTIMATED NUMBER TO BE IDENTIFIED, 1979
		REPORTED	ESTIMATE ^a	REPORTED	ESTIMATE ^a		
Mentally Handicapped	2.3%	23,517	16,680	22,174	16,390	16,390	0
Emotionally Disturbed	2.0%	3,278	14,505	1,929	14,252	14,525	12,323
Learning Disabled	3.0% ^a , 1.0% ^b	11,886	21,757	12,334	21,378	7,126	0 to 9,044
Speech Impaired	3.5%	26,375	25,383	23,181	24,941	24,941	1,760
Other	1.24%	5,361	8,993	4,185	8,836	8,836	4,651
TOTAL - ALL CONDITIONS		70,417	87,318	63,808	85,797	71,545	7,742 to 21,994
PERCENT OF SCHOOL AGE POPULATION		9.71%	12.04%	8.95%	12.04%	10.04%	1.1% to 3.1%

SOURCE: Part B year end reports and funding applications submitted by local school districts to the Department of Education; summary data provided by the Bureau. School age population data provided by the Urban Studies Center, University of Louisville.

^aDerived from estimated rates developed in 1976 by the U.S. Bureau of Education for the Handicapped, cited in Studies of Handicapped Students, Vol. II (Research Report EPRC 4537-11), SRI International, Menlo Park, California, 1978, page 3. These rates are representative of four post-1973 studies cited in the report.

^bDerived from estimated rates developed in 1968 by the U.S. Bureau of Education for the Handicapped, cited in Studies of Handicapped Students, Vol. II, op. cit. These rates are fairly representative of seven pre-1972 studies cited in the report.

Basing conclusions about the effectiveness of child find efforts of the Bureau of Education for Exceptional Children and school districts on the available data is difficult. Reported incidence rates vary widely, and comparable data is difficult to obtain. According to federal data, Kentucky's reported rate of children receiving special education services is average. For the 1977-78 school year, federal reports show special education programs in Kentucky serving 7.35 percent of its school age population. The average for the fifty states and six territorial jurisdictions was 7.36 percent. The range for the fifty states was 5.18 percent to 11.52 percent. However, the usefulness of the national rates for comparison is limited, for at least two reasons. First, the school age population figure used as a denominator in determining Kentucky's incidence is taken from extrapolated census data; this projection, 808,000 for 1978, is 11.4 percent higher than the University of Louisville Urban Studies Center estimate of 725,232 for that year. The rate derived from the latter, 8.18 percent, when compared to the other states' percentage rates of children served, would rank Kentucky in the sixty-third percentile among the fifty states and six territorial jurisdictions. However, the school age population data derived from extrapolated census data be as divergent from better estimates for other states as for Kentucky. This being the case, it is impossible to draw conclusions regarding Kentucky's relative performance in identifying and serving exceptional children. Secondly, definitions and criteria for handicapping conditions vary from state to state. There is no assurance that the national figures were derived from consistent application of uniform criteria.

Using the present system, it is virtually impossible to identify all exceptional children. Some will have handicaps that are overlooked; others will never be exposed to the educational system. A practical goal is to implement a system that will promote identification of an acceptable proportion of those needing services.

The Bureau of Education for Exceptional Children has promoted the location and identification of exceptional children since it was first established. Upon acceptance of the 1974 consent agreement and following the passage in 1975 of Public Law 94-142, the Bureau formalized and intensified these efforts. Responsibility for locating children was assigned to the Bureau's special projects unit from 1975 to 1979; staff time devoted to these activities approached that of one full-time equivalent employee during this period. In 1979, one staff member was assigned primary responsibility for statewide activities set forth in the Bureau's Annual Program Plan. These activities include (1) planning and policy development; (2) insuring that procedural safeguards are implemented; (3) coordinating and publicizing services; (4) maintaining contact with related access systems, including parents, private agencies, and the medical community; (5) providing personnel training and development services; and (6) developing management, evaluation, and information systems.

Each local school district also has a designated Child Find Coordinator. This role is usually assigned to the district's special education coordinator or supervisor. Some districts delegate such duties to the director of pupil personnel or other staff. The responsibilities of the local coordinators are set forth in a job description developed by the Department of Education. A Child Find Coordinator reports to a district superintendent and is responsible for coordinating all services and activities that relate to finding exceptional children, including activities of community agencies and organizations as well as school-based programs. Coordinators are responsible for implementing continuing campaigns to locate exceptional children, insuring that due process is afforded in identification and evaluation, and protecting the confidentiality

of personal data. Specific responsibilities of the district coordinators are equivalent to those of the state coordinator. With one exception, child find coordination duties are expected to require about twenty-five percent of the designee's time. Jefferson County is the only district employing a full-time Child Find Coordinator.

Kentucky's statewide child find program was implemented in 1975. One component was Project SEEK (Serve Every Exceptional Kentuckian), which was implemented in 1976 and consisted of a statewide public awareness media campaign. Brochures and posters advertising the availability of educational services to exceptional children and providing contact information were distributed to all school districts, county public health departments, and regional offices of the federal Supplementary Security Income program (a program of the U.S. Social Security Administration). Booths were set up at shopping malls to promote awareness of referral agencies and special education services. Radio and television announcements included a toll-free telephone number of the Frankfort Bureau offices for referring children and inquiring about services.

According to Bureau personnel, approximately 240 exceptional children were identified through Project SEEK. Bureau staff believe that the program generated additional identifications and placements of exceptional children at the local level. However, no firm data on such identifications and placements are available. Some Bureau staff felt that Project SEEK, because of personnel shortages, logistical problems, and the new requirements of the Education for All Handicapped Children Act, was not successful. Those requirements were misinterpreted and misunderstood by some parents, and made school districts apprehensive about the potential costs of serving the needs of all exceptional children. The Bureau implemented another major child find effort in May, 1980.

In an effort to insure that all handicapped children in the care or custody of other agencies receive appropriate services, the Bureau of Education for Exceptional Children has developed and signed official "memorandums of agreement" with the following:

1. Department for Human Resources.
2. Bureau of Vocational Education.
3. Bureau of Rehabilitation Services.
4. Bureau for the Blind.
5. Bureau of Corrections of the Kentucky Department of Justice.
6. Kentucky Head Start Network.

These agreements bind the parties involved to coordinated, cooperative efforts in identifying exceptional children and providing a free, appropriate public education to them in accordance with state and federal laws and regulations.

The Bureau of Education for Exceptional Children also performs other child find activities. Bureau staff review local district child find efforts in their evaluations of year-end reports and applications for continued funding. They assist districts in interpreting child find procedures and policies, and provide consultation regarding the production of child find materials. The Bureau's field service representatives also assist in local child find efforts and provide such other aid and consultation as may be requested.

There have been instances in Kentucky of incorrect identification and evaluation of exceptional children, and some handicapped children have been overlooked by the state's

educational system. Such problems are bound to continue at some level in the future. The important question is whether Kentucky has a system in effect which will locate most of those needing services.

Existing data are insufficient for drawing conclusions about the effectiveness of the Commonwealth's child find efforts. Identified exceptional children numbered almost ten percent of Kentucky's school age population in school year 1977-78, and about nine percent in 1978-79. Compared to the twelve percent national estimate, the totals identified would seem low. Yet compared to the incidence rates of roughly ten percent estimated by several earlier studies, it would appear that most of Kentucky's exceptional children have been identified.

Problems in Serving All Exceptional Children

Several factors may prevent children from receiving full, appropriate educational services. Potential hindrances include shortages of qualified special education teachers, minimum unit enrollment requirements, special transportation needs, costs of related services, and difficulties in finding appropriate and sufficient classroom space. The first four of these problems are discussed here. These brief expositions are conceptual for the most part, since accurate information on their prevalence is unavailable, and in some cases, virtually impossible to obtain. Some data from interviews and existing records are presented in this context.

Teacher Shortages

Perhaps the greatest obstacle to serving all exceptional children is the shortage of certified special education teachers. One reason for this is the heavy paperwork load. Another is that rural systems have difficulty attracting qualified special education teachers. According to records kept by the Bureau of Education for Exceptional Children, from February to July, 1979, seventy-two school districts requested assistance in finding 187 special education teachers. These requests came as responses to a solicitation and offer of assistance made by the Bureau in a State Department of Education newsletter and also in the form of direct telephone calls to the Bureau. In an effort to gauge the districts' success in finding teachers, twenty-two of these same districts were contacted by telephone one week before school started in August, 1979. Of these twenty-two, nine had filled their positions and thirteen still needed thirty-three teachers. For the school years 1976 through 1979, fewer special education units were operated by the districts than were allotted under the foundation program.

To alleviate these shortages, the Bureau of Education for Exceptional Children and the local school districts are recruiting special education teachers and providing support to local teachers to enter special education. The Bureau will provide financial support for teachers certified in another field to attend summer school to become certified in special education. Support will also be furnished to teachers who are qualified in one field of special education to expand their certification into additional fields. The Bureau set aside \$170,000 of its 1979 federal funds for these purposes, and expects to continue this support in the future.

Minimum Unit Enrollment Requirements

Minimum classroom size requirements may prevent districts from obtaining funding for a full special education unit. Insufficient funds also prevents hiring a part-time teacher or a

full-time teacher with the necessary certification to teach a small group. For example, a district with only two multiple handicapped children cannot receive funding for a full unit, which requires five students. In these cases, the children may be placed in programs in neighboring districts, or in a variation plan classroom unit. A variation plan unit is one which serves children of different handicaps. For example, mentally retarded, learning disabled, and emotionally disturbed children might be served together in one variation plan unit.

Transportation

Transporting handicapped students may be difficult and costly. Special transportation, such as by modified vans or buses, is more expensive than regular transportation. Some districts must incur additional costs to transport their exceptional children to other districts for special education services. Special transportation costs in eastern Kentucky are especially high, because of the mountainous terrain and sparse population. It is possible that some children are assigned to home instruction programs to avoid transportation costs.

Exceptional children are sometimes the last to arrive at school and the first to leave, resulting in a shortened school day. Yet a handicapped student's individual education plan may specify participation in extracurricular activities as part of his full, appropriate education. Because of the expense of special transportation services, however, the student may not be able to participate in them.

Costs of Related Services

Related services for exceptional students may be necessary if they are to benefit fully from their educational programs. These services include speech pathology and audiology, physical and occupational therapy, certain medical and health services, counseling, transportation, athletics, recreation, extracurricular activities, social services, and employment assistance. Such services can be expensive; indeed, for this reason some districts are reluctant to seek, identify and serve exceptional children.

CHAPTER IV

VOCATIONAL EDUCATION IN KENTUCKY

Federal Laws and Regulations

Although the original Vocational Education Act of 1963 has been amended by several acts, the latest being Public Law 94-482, its major purpose has remained to assist states in providing persons of all ages "ready access to vocational training and retraining which is of high quality, which is realistic in the light of actual or anticipated opportunities for gainful employment, and which is suited to their needs, interests, and ability to benefit from such training." Additionally, these laws and regulations are directed toward correcting national program weaknesses involving manpower needs data, discrimination related to sex or handicap, and disjointed service delivery.

Current manpower needs data are prepared by the Bureau of Labor Statistics of the U.S. Department of Labor and are based on national projections from 1970 population and business and industry censuses. These data have been criticized for inaccuracies in projecting state and local manpower needs. Congress has been especially critical of their lack of timeliness and the statistics utilized in estimating manpower demand.

In response to these criticisms, a National Occupational Information Coordinating Committee, with counterpart committees in each state, was created. This committee has the responsibility of providing the nation, states, and localities with more timely and accurate information on manpower needs and supply. The Vocational Amendments of 1976 require that not less than \$3 million nor more than \$5 million of the federal funds appropriated for vocational education be transferred each year to the Secretary of Labor for that purpose. Kentucky's Committee had received approximately \$130,759 in the eighteen months ending March 31, 1980.

According to P.L. 94-482, all states must employ a sufficient number of full-time persons responsible for designing and administering programs to detect and correct sex discrimination and bias. Each state is required to reserve \$50,000 in each fiscal year to accomplish this requirement. Additional federal funds may be used to modify curriculum and to provide awareness training for vocational teachers and administrators.

Discrimination involving race and physical handicap is also addressed in this legislation. P.L. 94-482 appropriates special funds for the disadvantaged in high poverty areas, increases the minimum percentage funding requirement for the disadvantaged, and establishes a fifty percent matching requirement for both disadvantaged and handicapped programs.

Federal regulations governing P.L. 94-482 required each state to develop a "Method of Administration" (MOA) by March, 1980—an affirmative action plan addressing the activities to be practiced by the occupational education administrative agencies in insuring equal access to employment and program services, regardless of race, sex, or handicap. Vocational education is also regulated by Title VI of the Civil Rights Act of 1964 (racial discrimination), Title IX of the Education Amendments of 1972 (sex discrimination), and Section 504 of the Rehabilitation Act of 1973 (handicapped discrimination).

An on-site review of the Elizabethtown region of Kentucky conducted by the Office of Civil Rights in November, 1978, cited eleven violations of these statutes. They included (1) a failure to insure nondiscrimination in programming and employment related to sex, race, and handicap); (2) a failure to provide the handicapped person with ready accessibility to facilities or to design a plan to accomplish modifications of facilities; and (3) a failure to develop appropriate policies of nondiscrimination for sex and handicap. The Office of Civil Rights required the Elizabethtown region to respond with written plans to correct these violations by January 15, 1980.

A telephone survey for the present study of thirteen state vocational technical schools and twenty-three area vocational education centers indicated that certain of the violations cited by the Civil Rights were also occurring in other regions of the state.

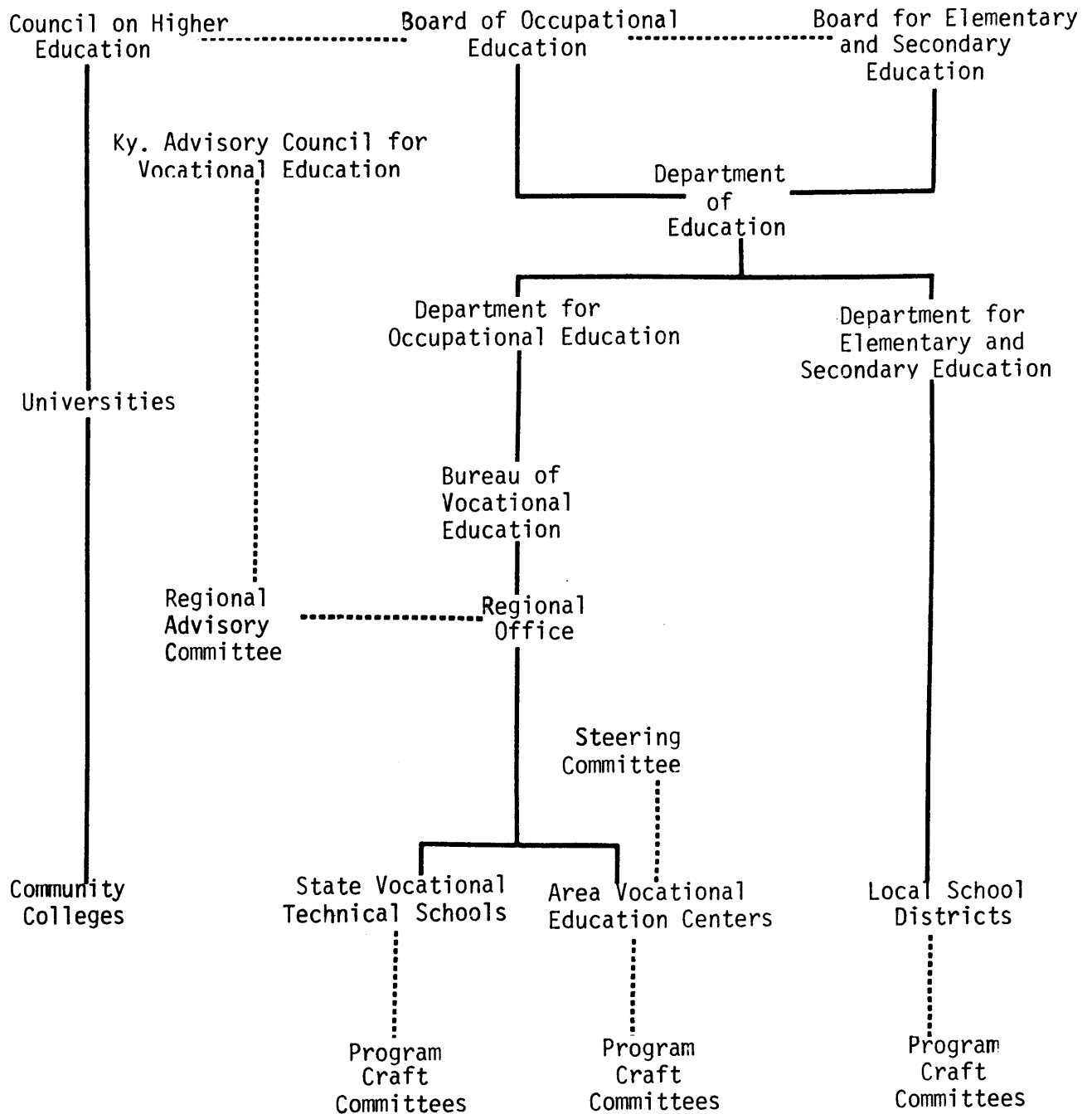
The Department of Education began in November, 1979, to address the problems detected in the Office of Civil Rights report. A plan to correct the violations cited was submitted in February of 1980. Specific plans to review possible violations in other regions have not been determined. However, it is anticipated by the Department of Education that this activity will be conducted during the process of developing the MOA. Improvements in facility accessibility have been underway since 1978. According to the Division of Building and Grounds of the State Department of Education, all regions of the state participated in a facilities survey to determine architectural barriers for the handicapped. Since most area centers are owned by local school districts, the Division of Building and Grounds has no authority or responsibility to enforce or insure local school district compliance. Those area centers and all state vocational schools owned by the state have reported the facility modifications required and have estimated the cost at \$956,503. An architectural firm employed by the Bureau of Facilities Management of the Kentucky Department of Finance is currently reviewing these modifications and cost estimates. The most common modifications identified as needed are restroom handrails and stalls, ramps, enlarged doorways, lower drinking fountains and telephones, and designated special parking.

State Laws and Regulations

State legislation specifically accepts requirements of the federal legislation (KRS 163.020). In 1977, the Board of Occupational Education was designated as the "sole state agency" for the purpose of developing and approving the state's plan for vocational education, as required by P.L. 94-482 [KRS 156.115(9)].

Figure 1 shows the coordinating, administrative, and advisory agencies responsible for vocational education in Kentucky. The program is under the control of the Board of Occupational Education³ which is composed of seven members from the community appointed by the Governor and two non-voting *ex officio* members, one from the Department of Elementary and Secondary Education and one from the Council on Higher Education (KRS 156.112). Kentucky statutes provide the Board with two staff persons, the Superintendent of Public Instruction as executive officer [KRS 156.112(5)], and a secretary employed by the Department of Education [KRS 156.112(7)].

FIGURE 1
Current Administrative Flow Chart of Agencies
Involved in the Vocational Education Process,
Commonwealth of Kentucky



----- Advisory Function
———— Direct Authority

SOURCE: LRC Staff.

According to Kentucky statutes, the Board has the following powers and duties:

1. To develop and to approve the annual and five-year plans for vocational education [KRS 156.112(9)];
2. To approve new construction [KRS 156.112(9)];
3. To approve new program offerings at or below the associate degree level [KRS 156.112(10)]; and,
4. To establish policies and procedures relating to the Department for Occupational Education [KRS 156.112(8)].

Administrative responsibility for occupational programs is not delegated by statute to the Board, but the Superintendent of Public Instruction may involve the Board in administrative matters pertaining to occupational programs under the control of the Department of Education [KRS 156.116(2)].

The Kentucky Advisory Council for Vocational Education is responsible for evaluating the performance of vocational education and for advising the Bureau of Vocational Education and the Board of Occupational Education as to the vocational needs and problems of the state.

The Bureau of Vocational Education in the Department for Occupational Education of the Department of Education administers funds received under P.L. 94-482 and manages the state-operated vocational facilities. In addition, the Bureau of Vocational Education serves as the primary planning and reporting agent for occupational programs offered in the state. This Bureau serves in an advisory capacity for planning, development, and implementation of local school district occupational programs.

The Council on Higher Education is the coordinating and regulating body for the programs offered in community colleges and universities. The Council's formal tie to the Department of Education and the Board of Occupational Education is by *ex officio* membership on the Board.

The Council is responsible for approving and reviewing programs offered in the community colleges and the universities [KRS 164.020(8)]. The universities and community colleges are responsible for administering and controlling programs within their institutions.

Secondary vocational programs in local schools and area vocational education centers are funded through unit allocations from the Kentucky Foundation Program. According to administrative regulation 705 KAR 2:030, local school districts must submit a request for units and an educational plan to the Bureau of Vocational Education for approval.

Vocational "non-contract" units for programs in local schools are allocated for full-time equivalent vocational teachers. The class day in Kentucky is defined as six hours; vocational teachers are permitted a one-hour planning period per day. "Non-contract" allocations are computed initially in September and amended in February for programs offered in local schools.

Unit allocations to local schools for secondary students attending a state-operated facility are computed differently. A "contract" unit is based on thirty students attending three hours per day, five days per week. Allocated funds are divided, with twenty percent transferred to the local school district owning the facility and eighty percent of the funds transferred to the Bureau of Vocational Education for operations. Allocations are computed in October, based upon the student enrollment as of October 1.

Facility Regulations

Funds for facilities construction may come from several sources—federal, state, and local funds, as well as construction bonds. To be eligible for federal funds a proposed facility must admit persons who have graduated from high school and must offer the minimum number of preparatory programs defined for that class of facility.

Equipment may be purchased with federal, state or local funds. According to 705 KAR 3:090, an equipment purchase using state or federal dollars must meet the standards set by the Bureau of Vocational Education. Purchases must be made in accordance with the policies and procedures established by the Kentucky Department of Finance (705 KAR 3:100).

Six types of vocational facilities are defined by the administrative regulations governing vocational education (705 KAR 3:010). These definitions specify the population and area to be served and the number and types of programs to be offered.

A “public specialized high school” is a separate facility serving one or more high schools, with a minimum enrollment of twelve hundred students in grades nine to twelve, and a minimum of five hundred students in grades eleven and twelve. This type of facility must offer a minimum of twelve vocational preparation programs to a student population with “an objective of occupational preparation.”

The type of program termed “department of a public high school” is required to serve one or more high schools with a minimum enrollment of twelve hundred students in grades nine to twelve. The high schools served must be within twenty-five miles or thirty minutes of the department. A high school department must offer at least five preparatory programs to a minimum of 180 students available for preparatory training.

A “department or division of a public junior college or community college or university” may be established to serve a geographic area with a population of 100,000 or more. This department must offer a minimum of twelve preparatory programs to at least five hundred full-time students who have completed or left high school.

An “area vocational education center” is a separate facility serving one or more high schools within twenty-five miles of the center. The high schools served must have a total enrollment of twelve hundred students in grades nine to twelve. The center must provide training for a minimum of 180 high school students. This type of facility may also serve persons who have completed or left high school.

A “state vocational-technical school” may be established in a geographic area having a minimum population of 100,000. This type of facility is required to offer at least twelve preparatory programs. In addition, it is required to serve at least five hundred day students who have completed or left high school. It may serve high school students who do not have another type of vocational facility available to them.

According to administrative regulations, “residential facilities” are to “be used for the purpose of demonstrating the feasibility and desirability of such a school for youth of high school age.” This type of facility may be established in areas having a high percentage of youths who have dropped-out of school and are unemployed. Residential facilities are to serve a minimum of five hundred full-time students. No fees, tuition or other charges are to be assessed residential students.

Local school districts desiring to construct an area vocational education school must submit an application to the Bureau of Vocational Education. Supporting information must in-

dicade the needs and interest of potential enrollees, the local manpower needs, and a description of the facilities to be offered. These applications must be reviewed by the Bureau and recommended by the Superintendent of Public Instruction to the Board of Occupational Education for approval.

To be eligible for federal funds, the proposed facility must offer the minimum number of programs required for that class of facility. If federal funds are not requested, the facility may offer less than the minimum number of programs, but must still be approved under the normal program approval process.

Facilities owned by a local school district and serving only that district are to be directly administered by the local board of education.

Facilities serving more than one high school or school district may be administered by the board of education owning the facility if the Bureau of Vocational Education grants permission. For this request to be authorized, the local board of education must demonstrate that it has the financial and supervisory capabilities to maintain the facility at the level at which the Bureau of Vocational Education could.

All state-owned vocational facilities and locally-owned facilities serving more than one high school or school district (with the exceptions noted above) are to be administered by the Bureau of Vocational Education. Authority for administration of these facilities is delegated by the Assistant Superintendent of Vocational Education to the regional vocational education director.

State-operated area vocational education centers are required to have a steering committee which meets no less than four times annually. The purpose of this committee is to advise the local facility coordinator on:

1. annual and long-range program plans;
2. procedures for implementing these plans; and,
3. management procedures for handling the details pertaining to program operations.

Steering committee members are appointed by the Superintendent of Public Instruction. Composition of the committee must include:

1. the superintendent of schools from each participating district;
2. a member of each local board of education;
3. the principal of a cooperating secondary school;
4. a lay citizen from each school district served; and,
5. a member of the Regional Advisory Committee on Vocational Education.

Vocational Education Programming

According to administrative regulation 705 KAR 4:010 the purpose of vocational instruction is:

1. to prepare individuals for gainful employment; or,
2. to prepare individuals for enrollment in advanced or highly skilled vocational and technical education programs; or,

3. to assist individuals in making informed and meaningful occupational choices; or,
4. any combination of the above purposes.

Programs to meet the above objectives may be offered in the areas of agribusiness, business and office work, health and personal services, home economics, industrial arts, marketing and distribution, practical arts, public service and special education. Exploratory classes in these fields may be offered to students in grades seven and eight. Preparatory programs are to be offered only to students in grades nine through twelve, high school dropouts or graduates sixteen years of age and older.

Program offerings for preparatory training must be of sufficient length to provide entry-level skills in the occupation chosen. Programs should meet on a daily basis. Whenever possible they are to provide students with access to student organizations, work experience and other related opportunities for enhancing the educational experience.

All program offerings must be approved by the Bureau of Vocational Education. A continuous evaluation of programs is to be conducted by the local facility administrator under guidelines and requirements specified by the Bureau. This evaluation must include a follow-up of students completing the program.

Program Offerings

Kentucky offers a wide spectrum of occupational training opportunities in the seven broad areas of agriculture, distributive education, health, home economics, business and office work, technical education and trades and industry. In FY 1978, over one hundred specific occupational programs were offered (See Appendix A for a complete listing). These occupations range from service station attendant to radiological technician, from small engine repairman to heavy equipment operators, from fireman to coal miner. Kentucky, incidentally, offers one of the few equine education programs in the country. In the next two years, four simulated mines are scheduled to open to train new miners and serve the training needs and federal mine safety requirements of working miners.

In addition to preparatory programs, courses are offered in life skills and career exposure. Non-gainful consumer and homemaking courses are designed to provide learning experiences not directly related to occupational preparation. These include parenting, consumer skills, and homemaking.

Career exploration is offered to students in grades seven and above. Generally referred to as practical arts, these programs provide students an opportunity to explore different occupational programs of their choice prior to making a training decision. These career exploration programs are distinct from career education programs offered through the Department for Elementary and Secondary Education.

Vocational programs for the disadvantaged and handicapped fall into two categories. Group guidance programs provide guidance and counseling services as well as remedial education. The second category, labelled "special programs," either provides supplemental services within a regular occupational preparation program or provides a modified occupational preparation program. The thrust of the various special programs is to serve handicapped and disadvantaged students within the regular program environment whenever possible.

Program Delivery

Table 15 presents the number and types of facilities serving Kentuckians in FY 1978. Local school districts serve both secondary and adult students. Area vocational education centers (AVECs) serve primarily secondary students. They do, however, serve adults when vacancies exist. An area center may serve one or more school districts. It is owned by one of the districts served but is operated by the Bureau of Vocational Education. It was the goal of the Bureau of Vocational Education to have an area center within twenty-five miles of every school district. This goal is now almost achieved.

State vocational technical schools (SVTSs) primarily serve adult students. These facilities are owned by the state and operated by the Department of Education.

Dormitories are provided at three locations in the state (Paducah, Madisonville and Paintsville). Original dormitory facilities were obtained by converting existing community facilities. However, the physical condition of these facilities has deteriorated to the point that new facilities are required. Replacement facilities were approved by the Board of Occupational Education in FY 1979.

Health occupations training centers serve both secondary and adult students. Currently there are four of these facilities in operation.

In addition to the facilities described above, programs are provided in five adult correctional institutions and two juvenile facilities. Special programs for the handicapped are offered in various schools and hospitals.

TABLE 15

NUMBER AND TYPE OF INSTRUCTIONAL FACILITIES
RECEIVING VOCATIONAL FUNDS
FY 1978

REGION	LOCAL SCHOOL DISTRICTS	AREA VOCATIONAL CENTER	VOCATIONAL TECHNICAL SCHOOLS	HEALTH OCCUPATIONS	UNIVERSITY, COMMUNITY COLLEGE	OTHER
Purchase	12	6	1		2	
Pennyrile	14	4	1	1	2	1
Green River	7	3	2		1	
Barren River	14	4	1	1	1	
Lincoln Trail	11	5	1		1	
Jefferson	8	2	1		2	3
Northern Kentucky	19	4	2		1	
Buffalo Trace	12	4			2	1
FIVCO	9	4	1		1	
Big Sandy	7	5	1		1	
Kentucky River	11	5	1		1	
Cumberland Valley	15	5	2	1	1	
Lake Cumberland	13	5	1		1	
Bluegrass	24	8	1	1	4	4
TOTAL	176	64	16	4	21	9

SOURCE: Table 4, 1978 Accountability Report, Bureau of Vocational Education.

NOTE: () indicates Under Construction.

TABLE 16

BUREAU OF VOCATIONAL EDUCATION BUDGET
AND RECEIPTS BY SOURCE OF FUNDS

FY 1978 FY 1979

FUNDS	BUDGET FY 1978	ACTUAL RECEIPTS FY 1978	BUDGET FY 1979	ACTUAL RECEIPTS FY 1979	BUDGET FY 1980
by Source:					
General Fund					
Regular Appropriation	\$17,331,700	\$17,850,987	\$29,550,700	\$29,496,976	\$32,926,700
Special Appropriation	1,000,000	1,000,000			
Continuing Appropriation			336,918		
Salary Improvement	3,374,400	1,651,319	768,397		
Reorganization Transfer		(525,926)			
TOTAL	\$21,682,500	\$19,976,380	\$29,550,700	\$30,602,291	\$32,926,700
Agency Receipts					
Balance Forwarded	\$ 279,282	\$ 1,913,253	\$	\$ 1,445,116	\$
Current Receipts*	12,055,640	9,421,001	12,819,200	10,057,953	13,330,300
TOTAL	\$12,334,922	\$11,334,254	\$12,819,200	\$11,503,069	\$13,330,300
Federal Funds					
Balance Forwarded	\$ 1,146,183	\$ (624,445)	\$	\$ (358,851)	\$
Current Receipts	12,302,317	17,822,042	12,307,400	15,446,190	12,724,300
TOTAL	\$13,448,500	\$17,197,597	\$12,307,400	\$15,087,339	\$12,724,300
TOTAL FUNDS	\$47,465,922	\$48,508,231	\$56,677,300	\$57,192,699	\$58,981,300
LAPSED FUNDS		\$ 499,784		\$ 355,083	

SOURCE: Budget information - The Kentucky Executive Budget 1978-80

Receipt information - Budget Development and Accounting Department, Department of Education

() indicates negative balance

* includes Foundation Program Contract appropriations, fees, sales and training contracted by other agencies.

Appropriations and Expenditures

Table 16 presents budget and actual receipts data for FY 1978 and FY 1979 by source of fund. This information was obtained from Department of Education budget reports by subtracting from the overall agency budget and actual receipts those monies associated with the Adult Basic Education program.

Table 17 presents the expenditures of the Bureau of Vocational Education by unit within the major administrative programs.

General Administration and Support. Under the major administrative category of general administration and support in Table 17 are four cost categories.

- Management Service
- Facilities Upkeep
- Capital Outlay
- Debt Service

Management service costs include those for the Bureau head and his deputy, for planning and evaluation and for sex equity administrative activities. Facilities upkeep represents expenditures for maintenance of facilities and replacement of old equipment. Capital outlay is expenditures for facility construction. Debt services is monies spent to retire construction bonds.

Program Development. The Program development budget in Table 17 encompasses six categories. Disadvantaged and Handicapped, Consumer and Homemaking, Public Service Training, and Cooperative Education are expenses related to those particular programs. Local School District support indicates expenditures for adult vocational classes support to community colleges and universities and, support for travel, equipment and operating costs related to the development and implementation of programs in local schools. Consultative Services represents similar expenditures by the Bureau for Technical Assistance to programs in state-operated facilities.

Vocational Program Operations. Expenditures for vocational program operations are the costs to administer and supervise the state-operated vocational facilities. They include salaries, maintenance and supplies related to instruction, and facility operations.

Program Supportive Services. Expenditures within program supporting services are costs for resource, curriculum and personnel development activities. Included also are costs for providing occupational information, student financial and guidance services.

Interagency Relations. The final expenditure category in Table 17, interagency relations, represents expenditures for new and expanding industries training, Comprehensive Employment and Training Programs (CETA), and veterans training programs.

Cost of Services. In the "1978 Accountability Report" submitted to the Department of Health, Education and Welfare, state-wide expenditures are reported by service activity within each subpart of P.L. 94-482. Table 18 presents these service activity expenditures as reported by the Bureau of Vocational Education totalled for all subparts.

Expenditures included in Table 18 are not consistent for the various administrative agencies included. Bureau of Vocational Education expenditures for salaries, operations and capital outlay are contained in the table. All federal funds expended are included. Only certified local school expenditures for salaries and only federal dollars expended by community colleges and universities are accounted for. Therefore, the combination of expenditure data con-

TABLE 17

BUREAU OF VOCATIONAL EDUCATION EXPENDITURES
BY ADMINISTRATIVE PROGRAM
FY 1978 FY 1979

ADMINISTRATIVE PROGRAM	EXPENDITURE FY 1978	LAPSE FY 1978	EXPENDITURE FY 1979	LAPSE FY 1979
GENERAL ADMINISTRATION				
by object: Personnel	\$ 208,428		\$ 254,131	
Operations	990,523		1,857,276	
Capital Outlay	1,337,659		2,176,406	
	<u>\$ 2,536,610</u>	<u>\$ 92,572</u>	<u>4,287,813</u>	<u>\$216,583</u>
by program: Management				
Service	\$ 285,075		\$ 327,079	
Facility Up-				
keep	508,093		1,156,146	
Capital Outlay	1,472,946		2,675,708	
Debt Service	270,496		128,880	
	<u>\$ 2,536,610</u>	<u>\$ 92,572</u>	<u>\$ 4,287,813</u>	<u>\$216,583</u>
PROGRAM DEVELOPMENT				
by object: Personnel	\$ 2,712,273		\$ 2,779,509	
Operations	3,613,781		4,824,009	
Capital Outlay	64,074		97,904	
	<u>\$ 6,390,128</u>	<u>\$165,508</u>	<u>\$ 7,701,422</u>	<u>\$ 74</u>
by program: Consultative				
Service	\$ 746,570		\$ 801,021	
Disadvantaged/				
Handicapped	2,476,777		2,840,563	
Consumer/				
Homemaking	897,358		874,613	
Public Service	606,247		574,236	
Cooperative Ed.	396,779		5 9,926	
Local District				
Support	1,266,397		2,051,063	
	<u>\$ 6,390,128</u>	<u>\$165,508</u>	<u>\$ 7,701,422</u>	<u>\$ 74</u>
PROGRAM OPERATIONS				
by object: Personnel	\$22,560,193		\$26,816,253	
Operations	9,408,245		9,511,766	
Capital Outlay	207,821		342,332	
	<u>\$32,176,259</u>	<u>\$120,625</u>	<u>\$36,670,357</u>	<u>\$ 7,167</u>
by program: Management				
Service	\$ 138,168		\$ 159,105	
Program				
Operations	31,699,784		35,413,245	
Adult Upgrade	388,307		1,098,001	
	<u>\$32,176,259</u>	<u>\$120,625</u>	<u>\$36,670,357</u>	<u>\$ 7,167</u>

Table 17
Bureau of Vocational Education Expenditures
by Administrative Program
FY 1978 FY 1979
Page Two

ADMINISTRATIVE PROGRAM	EXPENDITURE FY 1978	LAPSE FY 1978	EXPENDITURE FY 1979	LAPSE FY 1979
PROGRAM SUPPORTIVE SERVICES				
by object: Personnel	\$ 475,846		\$ 726,567	
Operations	2,416,040		2,764,557	
Capital Outlay	9,674		35,673	
	<u>\$ 2,901,500</u>	<u>\$ 97,815</u>	<u>\$ 3,526,797</u>	<u>\$ 30,424</u>
by program: Resource				
Development	\$ 405,477		\$ 555,521	
Curriculum				
Development	867,118		1,148,102	
Occupational				
Information	125,948		104,297	
Personnel				
Development	569,603		585,285	
Student				
Financial Aid	724,560		665,251	
Guidance	208,854		468,341	
	<u>\$ 2,901,500</u>	<u>\$ 97,815</u>	<u>\$ 3,526,797</u>	<u>\$ 30,424</u>
INTERAGENCY RELATIONS				
by object: Personnel	\$ 1,661,507		\$ 1,803,105	
Operations	796,076		811,041	
Capital Outlay	123,124		84,578	
	<u>\$ 2,580,707</u>	<u>\$ 23,264</u>	<u>\$ 2,697,724</u>	<u>\$100,834</u>
by program: Industrial				
Development	\$ 294,865		\$ 257,337	
CETA Training	2,139,991		2,282,192	
Veterans				
Training	145,851		159,195	
	<u>\$ 2,580,707</u>	<u>\$ 23,264</u>	<u>\$ 2,697,724</u>	<u>\$100,834</u>
TOTAL				
by object: Personnel	\$27,618,247		\$32,379,565	
Operations	17,224,665		19,768,649	
Capital Outlay	1,742,352		2,736,893	
	<u>\$46,585,264</u>	<u>\$499,784</u>	<u>\$54,885,107</u>	<u>\$355,083</u>

SOURCE: Budget Development and Accounting Office, Department of Education
Kentucky Executive Budget Historical Expenditure Data.

tained in this table reflects the expenditures for vocational education in state-operated facilities more than the expenditures in local schools.

The expenditures in Table 18 indicate that state and local funds contributed eighty-six percent of the total. Approximately ninety percent of all expenditures were for teacher salaries, facility operations and instruction-related activities. Seven percent of expenditures are attributed to administrative services. Combined curriculum development and research account for less than two percent. Personnel development used approximately one percent of funds. Finally, expenditures for the provisions of guidance services amount to less than one percent.

Cost of Instruction. Instructional expenditures by program are also included in the "1978 Accountability Report." This data, presented in Table 19, is the instructional services activity category from Table 18 less the operational costs for state-operated facilities. Including operational costs would necessitate prorating costs to programs on an institution-by-institution basis, which is not currently done.

According to Table 19, the largest area of total expenditures (thirty-one percent) is for trade and industry programs. State-operated facilities are the heaviest supporters of these programs. Trade and industry programs are sixty-two percent of state-operated facility expenditures, while only eight percent of local school expenditures. Local school expenditures are oriented toward consumer interests and homemaking (twenty-seven percent), business and office (twenty percent), agriculture (sixteen percent) and practical arts (ten percent). Federal funds expended in community colleges and universities amount to only one and one-half percent of all expenditures. Distribution of these funds is primarily in the area of special programs (sixty percent), with health occupations (fifteen percent) and consumer/homemaking (seven percent) as the next two highest expenditure categories.

TABLE 18

VOCATIONAL EDUCATION EXPENDITURES BY SERVICE ACTIVITY
(INCLUDES STATE, LOCAL AND FEDERAL FUNDS)

FY 1978

CATEGORY	PLANNED EXPENDITURE	1977 CARRY FORWARD	1978 FUNDS EXPENDED	TOTAL EXPENDITURE (% OF TOTAL)	STATE/LOCAL OUTLAY (% OF CATEGORY)	FEDERAL OUTLAY (% OF CATEGORY)	1978 CARRY FORWARD
Administration	4,539,690	0	4,490,879	4,490,879 (7.3%)	4,192,649 (93.4%)	298,230 (6.6%)	51,810
Instruction	56,506,755	548,704	54,903,467	55,452,261 (89.8%)	48,108,586 (86.8%)	7,343,675 (13.2%)	1,603,267
Guidance Services	661,314	0	503,495	503,495 (.8%)	203,314 (40.4%)	300,181 (59.6%)	157,819
Curriculum Development	401,000	0	226,055	226,055 (.4%)	0 (.0%)	226,055 (100.0%)	174,945
Support Services	50,749	0	9,498	9,498 (.0%)	4,749 (50.0%)	4,749 (50.0%)	41,251
Personnel Development	965,330	0	741,222	741,222 (1.2%)	348,171 (47.0%)	393,051 (53.0%)	224,108
Research	356,590	192,403	42,577	234,980 (.4%)	0 (.0%)	234,980 (100.0%)	314,013
TOTAL	\$63,481,428	\$741,197	\$54,946,044	\$61,658,390 (100.0%)*	\$52,857,469 (85.7%)*	\$8,800,921 (14.3%)*	\$2,567,213

SOURCE: 1978 Accountability Report, Bureau of Vocational Education.

* Percent of total expenditure for category.

TABLE 19

VOCATIONAL EDUCATION INSTRUCTIONAL EXPENDITURES
BY PROGRAM AND FACILITY

FY 1978

PROGRAM	STATE OPERATED		LOCAL SCHOOL		COMMUNITY COLLEGE UNIVERSITY		TOTAL ALL SCHOOLS	
	Expenditure	(%) ^a	Expenditure	(%) ^a	Expenditure	(%) ^a	Expenditure	(%) ^a
Agriculture	\$ 406,799	(1.9)	\$ 4,441,722	(16.1)	\$ 25,665	(3.3)	\$ 4,874,186	(9.7)
Business	2,395,255	(11.1)	5,581,292	(20.2)	49,941	(6.5)	8,026,488	(16.0)
Consumer/Homemaking	169,825	(0.8)	7,540,929	(27.3)	56,834	(7.4)	7,767,588	(15.5)
Distribution	237,384	(1.1)	1,973,994	(7.1)	26,163	(3.4)	2,237,541	(4.5)
Health	2,577,578	(11.9)	387,756	(1.4)	112,900	(14.6)	3,078,234	(6.2)
Home Economics	339,941	(1.6)	221,471	(0.8)	0	(0.0)	561,412	(1.1)
Practical Arts	0	(0.0)	2,707,124	(9.8)	0	(0.0)	2,707,124	(5.4)
Public Service	409,788	(1.9)	6,363	(0.0)	41,222	(5.3)	457,373	(0.9)
Special Programs	1,470,867	(6.8)	2,481,871	(9.0)	458,667	(59.5)	4,411,405	(8.8)
Technology	293,158	(1.4)	0	(0.0)	0	(0.0)	293,158	(0.6)
Trade & Industry	13,337,256	(61.6)	2,319,986	(8.4)	0	(0.0)	15,657,242	(31.3)
TOTAL	\$21,637,851 ^b		\$27,662,508		\$771,392		\$50,071,751	
PERCENT ^c	43.2		55.2		1.5		100.0	

SOURCE: 1978 Accountability Report, Bureau of Vocational Education, Kentucky State Department of Education.

^a Percent of total expenditures of column discrepancy from 100% due to rounding error.^b Does not include \$5,318,913 for operational expenses included in Instruction section of Table 18.^c Percent of total expenditures for all schools.

Financial Data Limitations

Currently there are no combined reports on total vocational education program expenditures in Kentucky. Reports generated under the approval of the Board of Occupational Education primarily reflect vocational education in local schools and Bureau of Vocational Education facilities. These reports provide only estimates of actual expenditures and are designed to report P.L. 94-482 programs.

Financial expenditure data for occupational training in universities and community colleges is not combined or reported with other vocational program expenditures. Data concerning the expenditures in institutions of higher education are reported periodically by the Council on Higher Education. The last report was issued for FY 1976 and a current report is under way for FY 1978 and FY 1979. This data is not currently integrated with other vocational expenditure data to provide a comprehensive picture.

The 1978 Accountability Report data on vocational facilities contains an additional problem, in that it provides a per student cost based on an inaccurate allocation method. The method used divides costs by the number of students and does not account for time-per-student differences. A six-hour full-time adult is counted as though equivalent to a three-hour high school student or a two-hour part-time adult student. The resultant per student expenditure estimates reported by the Bureau thus do not reflect actual facility and resource use. Other federal financial reports submitted by the Division of Finance for Vocational Education are calculated according to student contact hours but do not indicate per student cost or facility use.

Recommendation

The Division of Planning and Evaluation in the Bureau of Vocational Education should redesign its current per student cost allocation formula to account for student time differences.

Program Analysis

Vocational education in Kentucky is provided for a variety of students. Table 20 indicates the number and type of students served from FY 1974 to FY 1978. As indicated, the single largest population served has been secondary students. Adult (non-degree) students may attend classes full-time (long term preparatory) or part-time (short-term preparatory and supplemental). Post-secondary students, under the PL 94-482 definition, are those students enrolled in an associate or other degree program below the baccalaureate level.

The number of handicapped, disadvantaged, and females served in this period are also included in Table 20. The total number of handicapped and disadvantaged served are understated, since the figures represent only persons receiving special services or funds.

Vocational Education Enrollments

The major occupational programs of agriculture, distributive education, health, preparatory home economics, business and office work, and technical programs indicate a relatively constant enrollment pattern over time (Figure 2). Notable changes in enrollments are seen in consumer/homemaking, group guidance, special programs, practical arts, and trades and industry.

TABLE 20

STUDENT ENROLLMENT IN VOCATIONAL EDUCATION
BY TYPE OF STUDENT
FY 1974 - FY 1978

TYPE OF STUDENT	FY 1974	FY 1975	FY 1976	FY 1977	FY 1978
Secondary	119,260	138,804	156,616	160,802	168,990
Post-Secondary	13,838 ^a	4,535	5,385	6,723	6,314
Long-Term Preparatory	NR ^b	17,426	14,898	12,703	15,572
Short-Term Preparatory	3,657	3,081	2,819	2,036	2,085
Short-Term Supplemental	56,125	62,899	60,602	67,334	70,189
Apprentice	1,243	1,125	1,138	1,295	1,330
TOTAL	194,123	227,870	241,458	250,903	264,480
Disadvantaged ^c	32,178	36,374	36,838	41,080	35,594
Handicapped	3,602	4,116	5,031	5,411	5,792
Female	NR	129,301	136,595	135,129	135,722

SOURCE: Enrollments in Vocational Education Programs, Bureau of Vocational Education.

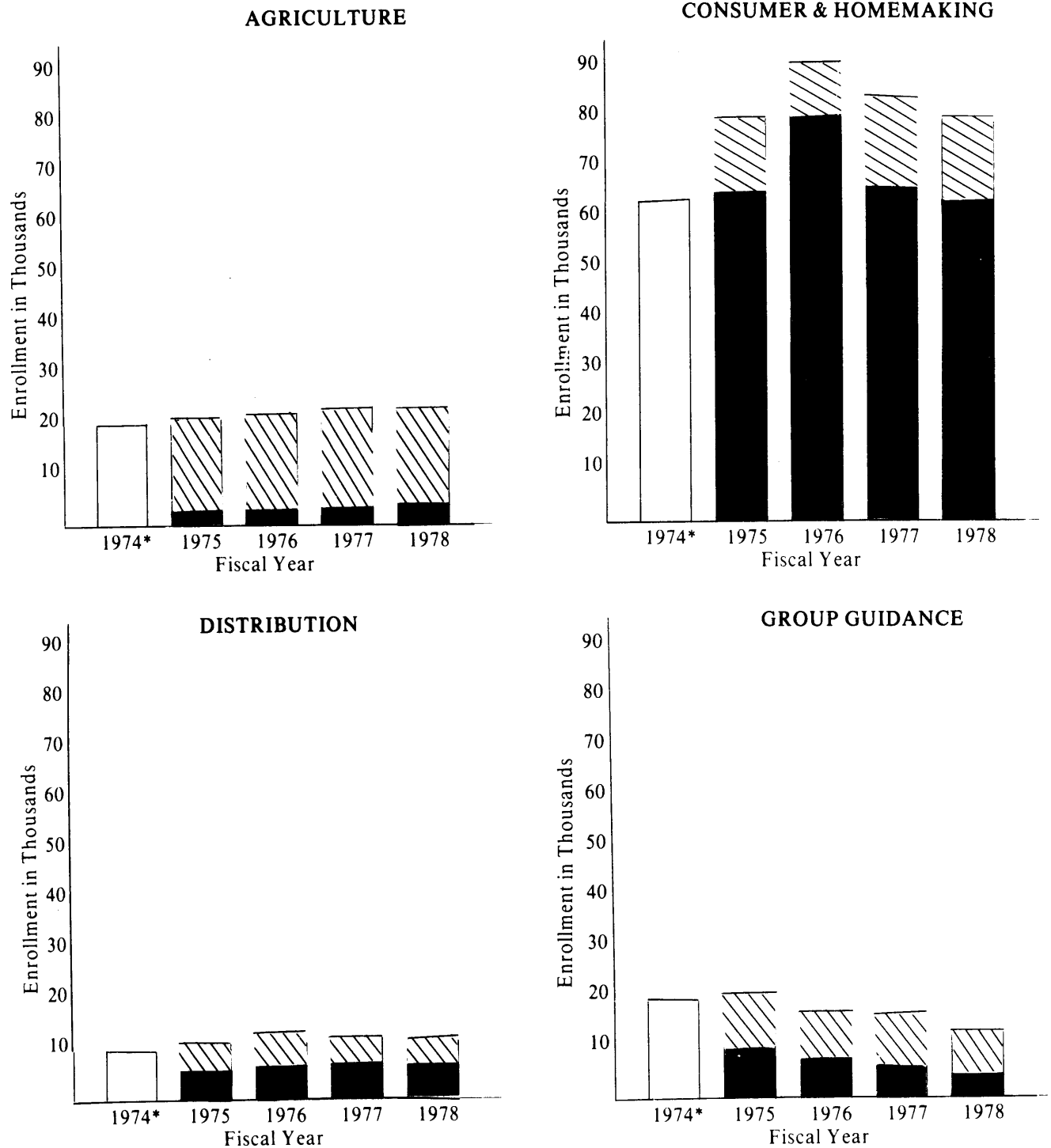
^aIncludes Post-Secondary and Long-Term Preparatory.

^bNot Reported Separately from Supplemental in this year.

^cIncluded in above totals.



Figure 2

**TOTAL ENROLLMENTS IN VOCATIONAL EDUCATION PROGRAMS BY
OCCUPATIONAL CATEGORY AND SEX OF STUDENT
FY 1974 - FY 1978**

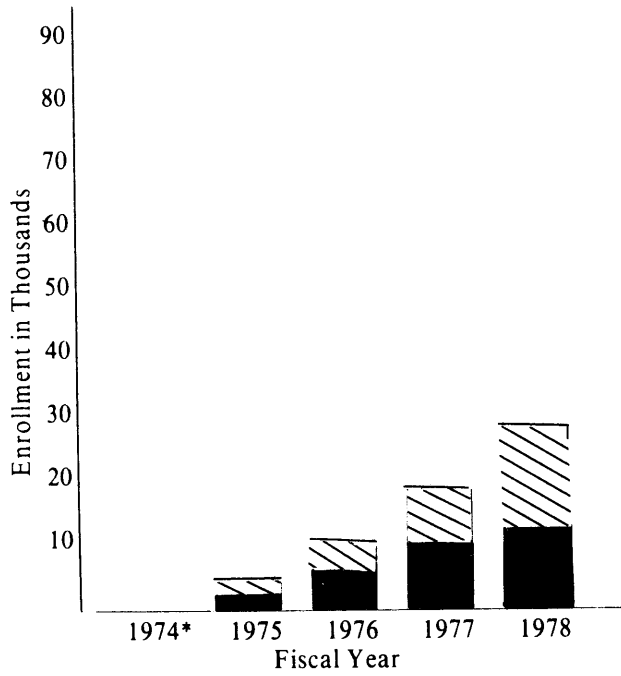


SOURCE: *Enrollments in Vocational Education Programs, 1974-1978*, Bureau of Vocational Education.

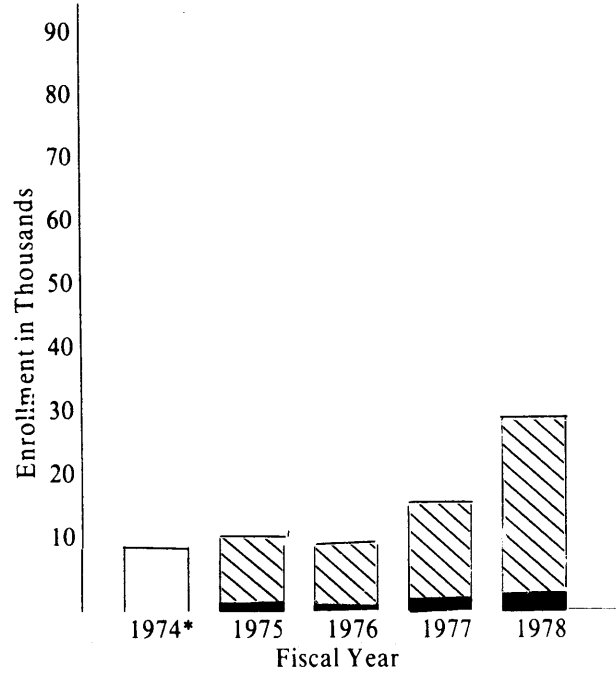
NOTE: *1974. Enrollments are not reported by sex.

 — Male Enrollment
 — Female Enrollment

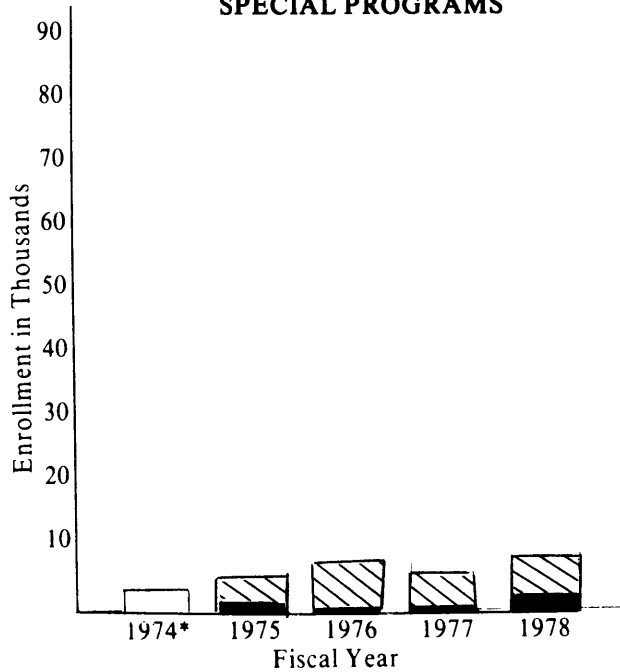
PRACTICAL ARTS



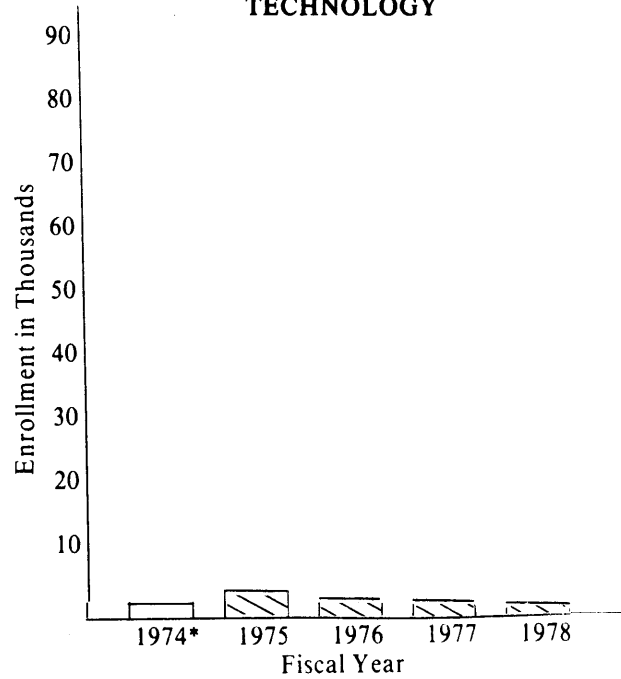
PUBLIC SERVICE



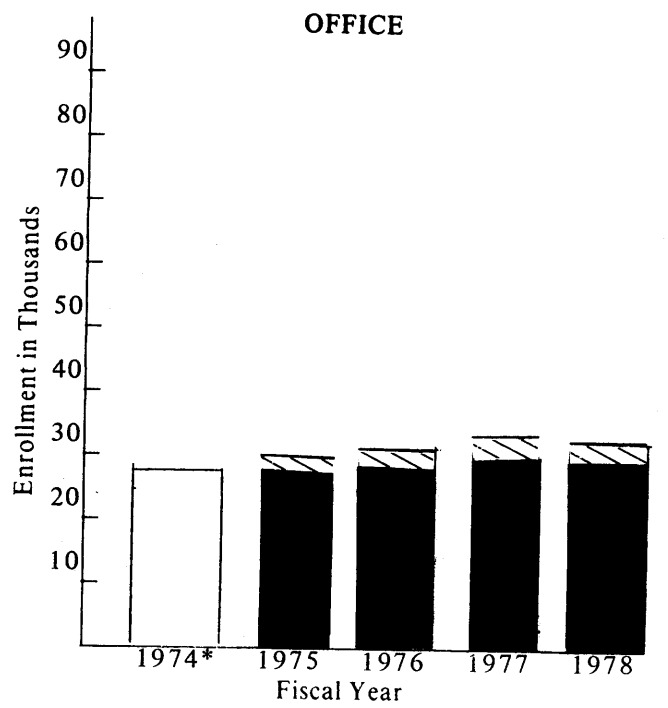
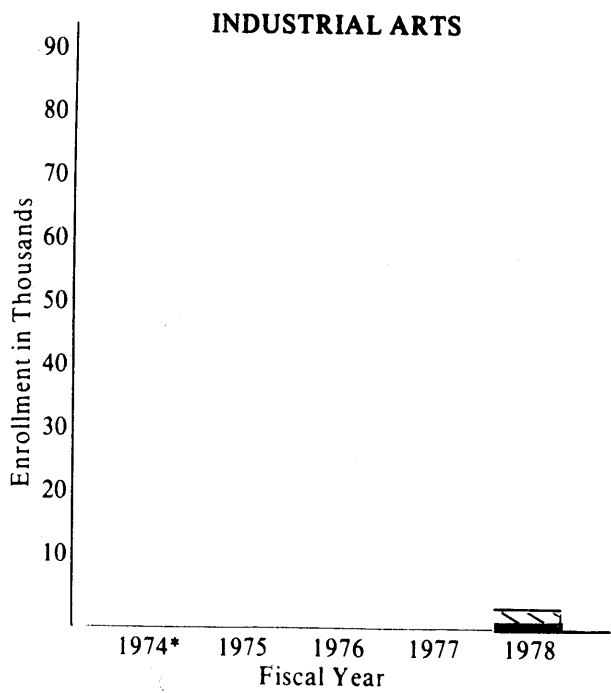
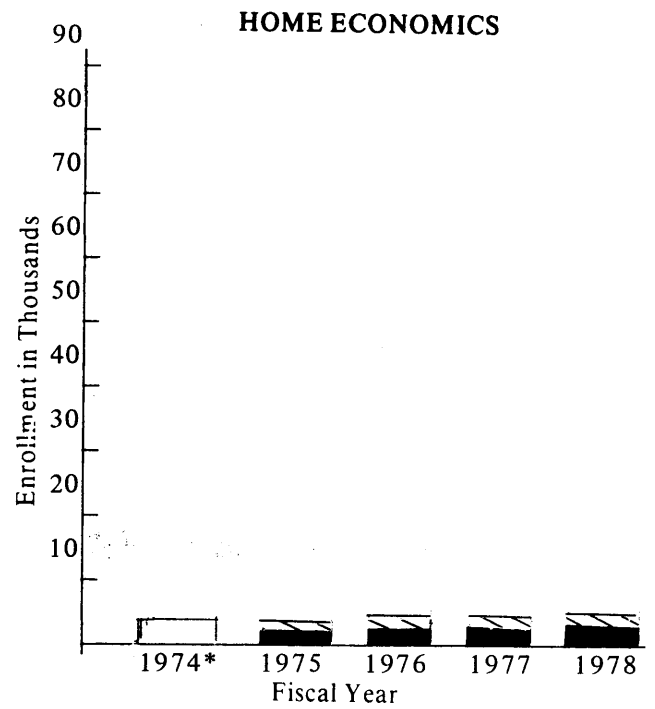
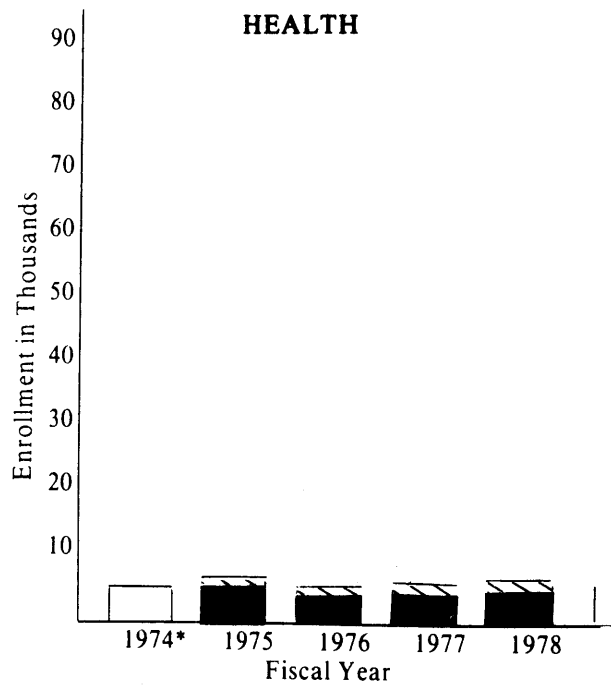
SPECIAL PROGRAMS



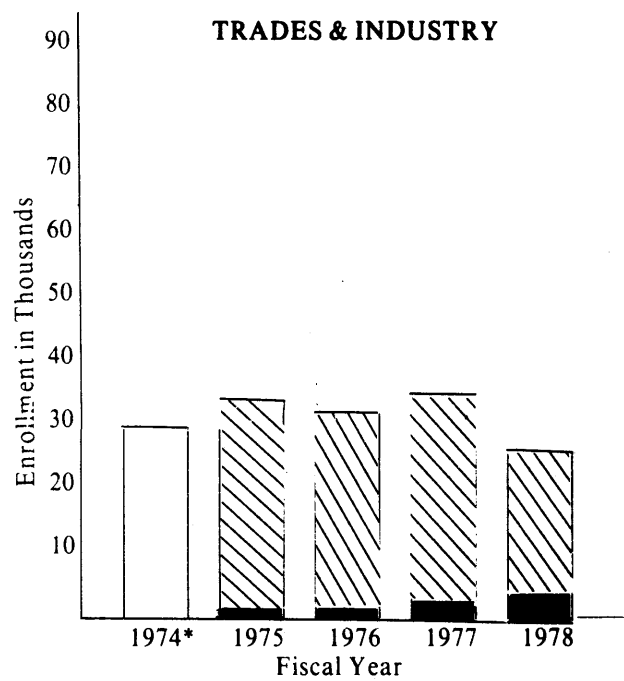
TECHNOLOGY



* See note on previous page.



* See note on first page.



* See note on first page.

TABLE 21
VOCATIONAL EDUCATION ENROLLMENTS
BY OCCUPATIONAL CATEGORY
FY 1978

OCCUPATIONAL CATEGORY	ENROLLMENT					
	SECONDARY (%)	Post SECONDARY	LONG TERM PREPARATORY (%)	SHORT TERM PREPARATORY (%)	SHORT TERM SUPPLEMENTAL (%)	TOTAL (%)
AGRICULTURE	17,884 (10.6)	19	78 (.3)	0 (.0)	4,871 (6.9)	22,852 (8.6)
BUSINESS & OFFICE	26,521 (15.7)	177	1,423 (2.8)	1,130 (54.2)	4,691 (6.7)	33,942 (12.8)
CONSUMER & HOMEMAKING	54,003 (32.0)	2,118	3,311 (33.5)	0 (.0)	17,099 (24.4)	76,531 (28.9)
DISTRIBUTION	9,452 (5.6)	49	0 (.8)	657 (31.5)	2,075 (3.0)	12,233 (4.6)
GROUP GUIDANCE	11,127 (6.6)	200	0 (3.2)	0 (.0)	0 (.0)	11,327 (4.3)
HEALTH	1,717 (1.0)	925	1,257 (14.7)	277 (13.3)	1,643 (2.3)	5,819 (2.2)
HOME ECONOMICS	1,854 (1.1)	0	0 (.0)	21 (1.0)	1,947 (2.8)	3,969 (1.5)
INDUSTRIAL ARTS	2,195 (1.3)	0	0 (.0)	0 (.0)	0 (.0)	2,195 (.8)
PRACTICAL ARTS	26,267 (15.5)	0	0 (.0)	0 (.0)	0 (.0)	26,267 (9.9)
PUBLIC SERVICE	55 (.0)	0	0 (.0)	0 (.0)	30,816 (43.9)	30,871 (11.7)
SPECIAL PROGRAMS	1,152 (1.7)	2,693	2,154 (42.6)	0 (.0)	0 (.0)	5,999 (2.3)
TECHNICAL	233 (1.1)	0	583 (3.4)	0 (.0)	76 (1.1)	892 (.3)
TRADE & INDUSTRY	16,530 (9.8)	133	7,949 ^a (2.1)	0 (.0)	6,971 (9.9)	31,583 (11.9)
TOTAL	168,990 (100)	6,314 (100)	16,902 (100)	2,085 (100)	70,189 (100)	264,480 (100)

SOURCE: FY 1978 ENROLLMENTS IN VOCATIONAL EDUCATION PROGRAM, BUREAU OF VOCATIONAL EDUCATION.

^a INCLUDES 1,330 STUDENTS ENROLLED IN APPRENTICESHIP PROGRAMS.

TABLE 22
FEMALE AND MALE ENROLLMENTS
BY OCCUPATIONAL CATEGORY
FY 1978

Occupational Category	Enrollment			
	Female	Percent	Male	Percent
Agriculture	2,346	(1.7)	20,506	(15.9)
Business and Office	28,656	(21.1)	5,286	(4.1)
Consumer and Homemaking	61,786	(45.5)	14,745	(11.5)
Distribution	7,340	(5.4)	4,893	(3.8)
Group Guidance	4,946	(3.6)	7,529	(5.8)
Health	5,143	(3.8)	676	(.5)
Home Economics	3,510	(2.6)	459	(.4)
Industrial Arts	208	(.2)	1,987	(1.5)
Practical Arts	12,805	(9.4)	13,462	(10.5)
Public Service	3,817	(2.8)	27,054	(21.0)
Special Programs	2,697	(2.0)	2,154	(1.7)
Technical	81	(.0)	811	(.6)
Trade and Industry	2,387	(1.8)	29,196	(22.7)
TOTAL	135,722	(100)	128,758	(100)

SOURCE: FY 1978 Enrollments in Vocational Education Programs,
Bureau of Vocational Education.

An inspection of the female enrollment patterns from FY 1974 to FY 1978 (Figure 2) reveals little change in the non-traditional programs of technology, agriculture, and trades and industry. However, there appears to be a decreased in enrollments in one traditional program, consumer and homemaking. Overall this data suggests that attempts by the Bureau of Vocational Education to encourage enrollments in non-traditional areas have had little noticeable effect.

Analysis of Population Served. Elementary and secondary student enrollments for FY 1979 totaled 232,046 for grades seven through ten, and 94,018 for grades eleven and twelve.⁴ Preparatory vocational education programs enrolled eight percent of the seventh through tenth graders (18,775) and 54% (51,038) of the eleventh and twelfth graders. Another three percent (7,016) of the seventh through tenth graders and six percent of the eleventh and twelfth graders were served in special programs. Consumer and homemaking and practical arts programs showed total enrollments of 66,712 seventh through tenth graders and 35,256 eleventh and twelfth graders ("consumer and homemaking" includes duplicates, since students may enroll in more than one program). Department of Education FY 1978 estimates indicate that 6.2 percent of Kentucky high school graduates continued their education in a trade or specialized school after graduation.⁵ Data is not available on the number of vocational program graduates enrolling in advanced vocational training.

The adult population served by vocational education includes high school dropouts as well as high school graduates. To obtain the adult population eligible for vocational education it is necessary to calculate the number of high school dropouts aged sixteen to seventeen. To estimate the number of dropouts aged sixteen to seventeen, the 1977 population estimate (most recent available) of sixteen to seventeen-year-olds (134,108) was multiplied by the average ninth grade dropout rate in Kentucky (thirty-five percent), yielding an estimate of 46,938 dropouts aged sixteen and seventeen.

According to FY 1977 population estimates there were 2,012,103 persons aged eighteen to sixty-four in Kentucky. Adding these two estimates yields a total eligible adult population for FY 1977 of 2,059,041. This figure is somewhat inflated by the presence of some nineteen and twenty-year-old high school students. However, the FY 1977 population estimate is an underestimate of the FY 1978 population and may offset the high school students included in the adult estimate. Using this 1977 estimate of 2,059,041 as the FY 1978 estimate of adults eligible for vocational education, it appears that five percent (108,459) of the eligible adult population is being served in combined preparatory and non-gainful programs, while only two percent (42,718) is being served in preparatory vocational programs.

From the data on secondary and adult students served, it is evident that vocational education in Kentucky heavily emphasizes service to high school students. According to population forecasts for the period 1970 to 2000, the fifteen to nineteen population will increase only 16.5 percent, while the twenty to sixty-four population will increase 51.6 percent.⁶ For the years 2000 to 2020, the fifteen to nineteen-year-old group will increase 6.71 percent, while the twenty to sixty-four-year-old group will increase 26.6 percent.⁷

Recommendation

In light of the estimated percentage of adults now being served in the increasing percentage of adults projected to the year 2020, it seems that the Kentucky vocational educa-

tion system should begin shifting its service emphasis to provide greater training to the adult population (This same conclusion has been expressed by the Kentucky Advisory Council for Vocational Education in its 10th Annual Evaluation Report).

The Board of Occupational Education has acknowledged the need for greater emphasis on adult training opportunities and has taken steps toward increasing them. In its September, 1980, meeting, the Board of Occupational Education ranked construction priorities according to the percentage of population being served within the proposed construction area. According to this ranking system, those post-secondary facility construction requests in areas with the lowest percentage of adults served were given highest priority.

Program Effectiveness

To evaluate the effectiveness of vocational education, several criteria have been suggested, such as training-related placement rate, acceptable career progress, income, job satisfaction, and mobility potential.⁸ Nationally, related placement rate is the most common follow-up information collected by vocational programs. Most often this information is collected alone, although some evaluation systems include income as corollary data. Acceptable career progress information has not developed into an effective evaluation criterion, since it requires subjective determinations by both the evaluator and the trainee. The job satisfaction criterion is also dependent on the trainee's subjective response and is not an effective criterion alone. Mobility potential, both geographic and professional, is not commonly used as an evaluation criterion, because it requires repeated follow-up and detailed information on the reasons for mobility, degree of relatedness and the effect of training on potential mobility.

The training evaluation data available in Kentucky for FY 1978 consists of completion rates and follow-up information on completers (defined by federal regulation as total program completers or early leavers with marketable skills—those who obtain training related to employment), indicating current employment or educational status at six to eight months after completion.

Beginning in FY 1979, training-related placement data will be available on three groups of completers—total completers, terminees completing more than fifty percent of the program, and terminees completing less than fifty percent of the program. Detailed information on the types of terminees and reasons for termination is not compiled.

The use of training-related placement rates for evaluation has been criticized for emphasizing job preparation while overlooking the other purposes of vocational education—self-enrichment, stimulation of academic interest or achievement, extension of occupational horizons, and provision of social and cultural talents.⁹ Despite this criticism, training-related placement is the only criterion currently available in Kentucky and it will therefore be used in this review to evaluate the success of vocational education in Kentucky. Before analyzing the completion and follow-up data, however, certain limitations must be acknowledged.

The first limitation involves the reported student status data. To judge the effectiveness of training programs in terms of immediate output, it is necessary to know the number of enrollees eligible for completion as well as the completion and termination rates. Although specific grade level information is collected, the enrollment figures compiled and reported by the Bureau of Vocational Education reflect combined grade level enrollments, not just potential graduates or completers. Beginning with FY 1979 grade level enrollments will be reported in

two groups, eleventh and twelfth grade enrollments and enrollments in tenth grade and below. Since the FY 1978 enrollment figures include all grade levels, a comparison between enrollment and completion is an ambiguous indication of output success. Additionally, the completion rate is contaminated because the federal definition combines total program completers and terminees obtaining related employment.

For an adequate program evaluation, termination data as well as completion data is needed. Data on the grade level of terminees and reason for termination is collected by the Bureau of Vocational Education, but it is not tabulated. (The only exception, beginning in FY 1979, is the tabulation of the number of transfers from one program to another within an institution.) Tabulation of the number of terminees and the reasons for termination would be valuable in making decisions about program effectiveness. Knowing completion and termination rates would provide feedback on the ability of the program to retain students. Employment rates would provide feedback on the ability of the program to provide trainees with marketable skills in the area trained.

The second major limitation in evaluation of effectiveness is the definition of related employment. Nationally, no standardized definitions exist for related employment in each occupational area. The person performing the follow-up must determine the relationship. Persons doing follow-up have available to them a reference guide, the Directory of Occupation Titles, which defines for each occupational title the skills involved in that occupation. However, unrelated occupations may involve similar skills. For example, highway technology and agricultural production both require a knowledge of geological characteristics and the operation of earthmoving equipment. If these basic skills are used to determine relatedness, a person trained in highway technology and employed in agricultural production could be classified as obtaining related employment.

A final factor affecting relatedness is the objectivity of the person performing follow-up. In most cases, this person is the teacher who trained the student. Since a successful employment rate is an indirect measure of the instructor's teaching success, it is possible that the decision of relatedness may be consciously or unconsciously biased by the instructor's own subjective appraisal of his or her success or by a desire to present a positive impression.

Completion Rates. To compare total enrollment data with completion rates, an estimate of the number of potential completers must be established. Occupational preparation programs are generally two years in length. Therefore, the Occupational Information Unit of the Bureau of Vocational Education suggest that fifty percent of the preparatory enrollments would represent an estimate of the number of potential completers. Using this fifty percent rate, Table 23 indicates that two programs, health occupations and distributive education, meet this standard, while most programs range from twenty to thirty-nine percent. When completion rates are viewed separately by type of student, two secondary programs (health occupations and distributive education), three post-secondary programs (agriculture, health occupations, and business and office), and five adult programs (agriculture, distributive, health occupations, business and office, and trades and industry) approach or surpass the fifty percent ideal.

Without data concerning the reasons for or the types of terminations, the causes of low completion rates remain speculative. Some possible causes may be the inability of a program to maintain student interest, weak guidance and counseling, or high enrollments of uncommitted students.

TABLE 23
VOCATIONAL EDUCATION PROGRAM
ENROLLMENTS AND COMPLETIONS
FY 1978

OCCUPATIONAL PROGRAM	PROJECTED MANPOWER	TOTAL ENROLLMENTS	TOTAL COMPLETIONS	PERCENT OF COMPLETERS
AGRICULTURE				
Secondary		6,532	2,547	39
Post-Sec.		19	8	42
Adult		78	32	41
Subtotal	1,560	6,629	2,587	39
DISTRIBUTION				
Secondary		2,721	1,835	67
Post-Sec.		49	13	27
Adult		635	474	75
Subtotal	15,890	3,405	2,322	68
HEALTH				
Secondary		1,708	1,140	67
Post-Sec.		925	345	37
Adult		1,534	883	58
Subtotal	7,128	4,167	2,368	57
HOME ECONOMICS				
Secondary		1,854	611	33
Post-Sec.		0		
Adult		159	39	25
Subtotal	3,860	2,013	650	32
BUSINESS & OFFICE				
Secondary		26,521	4,875	18
Post-Sec.		177	114	64
Adult		2,523	981	39
Subtotal	17,160	29,221	5,970	20
TECHNOLOGY				
Secondary		201	55	27
Post-Sec.		0		
Adult		659	156	24
Subtotal	910	860	211	25
TRADE & INDUSTRY				
Secondary		16,514	4,133	25
Post-Sec.		0		
Adult		8,003	3,250	41
Subtotal	20,730	24,517	7,383	30
ALL PROGRAMS				
Secondary		56,051	15,196	27
Post-Sec.		1,170	480	41
Adult		13,591	5,815	43
	67,238	70,812	21,491	30

SOURCE: Kentucky Department of Education, Bureau of Vocational Education, Enrollments, Completions and Placement of Vocational Education Students for School Year 1977-78.

TABLE 24

VOCATIONAL EDUCATION GUIDANCE ACTIVITIES
AS REPORTED BY TEACHERS

FY 1980

TYPE OF SCHOOL	ALWAYS OR MOST OF THE TIME		SOMETIMES		RARELY OR NEVER		DON'T KNOW		SURVEYED Number	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Surveyed	Responding
QUESTION 1: Written guidance plans are required before student enrolls in vocational program.										
SVTS	30	28.5	5	4.8	28	26.6	42	40.0	112	105
AVEC	12	6.0	15	7.6	121	61.1	50	25.3	204	198
Local School	16	16.8	12	12.6	42	44.1	25	26.3	99	95
Health Center	8	44.3	2	11.1	4	22.2	4	22.2	18	18
TOTAL	66		34		195		121		433	416
QUESTION 2: Necessary guidance and information is provided to student to make sound decisions.										
SVTS	66	61.6	17	15.9	8	7.5	16	15.0	112	107
AVEC	82	41.0	45	22.5	41	20.5	32	16.0	204	200
Local School	35	36.4	33	34.4	16	16.6	12	12.5	99	96
Health Center	15	83.3	0	0	0	0	3	16.7	18	18
TOTAL	198		95		65		63		433	421
QUESTION 3: Students know about job opportunities and income potential in their geographic area.										
SVTS	75	79.3	16	14.8	9	8.3	8	7.4	112	108
AVEC	126	62.4	33	16.3	26	12.8	17	8.4	204	202
Local School	32	32.6	41	41.8	17	17.4	8	8.2	99	98
Health Center	16	88.9	1	5.6	1	5.6	0	0	18	18
TOTAL	198		91		53		33		433	426

SOURCE: Vocational Education teachers survey conducted by Program Review and Investigation.

Data on the ability of vocational programs to maintain interest is unavailable. Data on weak guidance and counseling activities is provided from two sources. Table 24 displays the responses of a sample of 354 vocational teachers (79 consumer and homemaking teachers were excluded) to three mail survey questions concerning guidance. As indicated, guidance plans are rarely required of students, especially in the secondary facilities. The provision of information regarding career opportunities and manpower needs is reportedly better. It appears from the distribution of responses for questions two and three that the provision of guidance is much weaker in local schools and area centers than in state schools and health centers. Furthermore, student awareness concerning job opportunities and income potential receives a much lower rating in the local schools than in the other types of facilities. One explanation of this discrepancy may be that vocational students in public schools and area centers are usually counseled by the regular school counselor, whereas students in the other facilities are counseled by a vocational counselor.

A second indicator of weak guidance and counseling activities was presented above in the Appropriations and Expenditures section. There it was seen that less than one percent of vocational expenditures were for guidance activities.

Supporting data indicating moderately high enrollments of students not committed to pursuing the occupation in which they are receiving training is indicated in Table 25. This table presents the responses of 354 occupational teachers to a mail survey. (The total of 433 teachers responding was reduced to 354 by excluding 79 non-preparatory home economics teachers.) Occupation program teachers were asked to estimate the percentage of their students who were not serious about pursuing their area of training as a career. Responses indicate that approximately forty-one percent (27) of the local school district teachers felt that more than twenty-five percent of the students enrolled in their classes were not serious about pursuing the occupation for which they were being trained. Fifty-three percent (96) of the area center teachers felt that twenty-five or more percent of their students were not seriously interested. These responses can be contrasted to those from state vocational technical schools [nineteen percent (17)] and health occupation centers [zero percent (0)].

One possible reason for the higher percentage of non-committed students enrolled in occupational preparation programs in area centers and local school districts may be a function of age or experience. Secondary students are characteristically less mature in terms of their career awareness and occupational goals than adult students, who usually have some work experience background and a firmer goal orientation.¹⁰

Low student commitment (resulting in "over-enrollment") at the secondary levels may result from two other factors: the relatedness of the fields chosen to the traditional economic structure of the state (in Kentucky's case, agriculture) or from certain non-preparatory purposes of vocational education, especially self-enrichment and the provision of social and cultural talents. Excessive enrollments in areas of agriculture and auto mechanics, incidentally, are apparent nationally.

One solution suggested for the apparent over-enrollments is to clearly distinguish between specific preparatory programs and programs to serve other educational purposes, such as self-enrichment or career exploration.¹¹ This type of change would reduce the state's allocation of federal funds, which heavily emphasizes distribution to local schools. In its present form the

TABLE 25

TEACHERS ESTIMATES OF PERCENTAGE OF
NON-CAREER ORIENTED STUDENTS
ENROLLED IN PREPARATORY PROGRAMS

FY 1980

TYPE OF SCHOOL	LESS THAN 25 PERCENT		FROM 25-49 PERCENT		MORE THAN 50 PERCENT		MISSING RESPONSES		NUMBER RESPONDING
	NO.	Percent	No.	Percent	No.	Percent	No.	Percent	
SVTS	75	81.5	11	12.0	6	6.5	20	22	92
AVEC	84	46.7	57	31.7	39	21.6	24	13	180
Local School	39	59.1	16	24.0	11	16.6	33	50	66
Health Center	16	100.0	0	0	0	0	2	13	16
TOTAL	214	60.4	84	23.7	56	15.8	70	22	354

SOURCE: Vocational Education teachers survey, conducted by Program Review and Investigation.

NOTE: This sample of 354 was selected from the 433 teachers responding to the mail survey by removing 79 instructors teaching non-gainful home economics classes.

Vocational Education Act limits a large proportion of those funds to preparatory occupational programs. Relabeling those preparatory programs serving such purposes as career exploration or self-enrichment would require the state to fully fund these programs.

Meeting Kentucky's Manpower Needs. The manpower demand data used by the Bureau of Vocational Education to estimate program needs is compiled from the United State Department of Labor's BLS Matrix system. This system uses unemployment insurance records and the latest population census data to produce an occupation by industry profile of employment projections for several years. Estimated future demand is based on industrial growth projections and estimated attrition (death and retirement rates.)

This approach is seriously limited, however, by the uncertainties of future levels of economic activity, rates of technological change, and productivity trends; nor does it allow for substitutions of one type of labor for another or for interoccupational mobility.

The information provided by the BLS Matrix system does not correspond to the Office of Education (O.E.) code numbers used for reporting vocational education programs. Therefore, the Occupational Information Unit must recode this data into the classifications required by the Office of Education for reporting supply data. This recoding distorts the already inexact demand information.

Although the manpower demand data has several limitations, it is purported by the U.S. Department of Labor to be the best indicator of manpower demand currently available to the state. According to the Bureau of Manpower Services, although the manpower demand values are only estimates of actual need, they do provide a good indicator of the relative manpower needs for the various occupations.

This manpower demand data is the only data reported by the Bureau, and it is the only such data supplied local program administrators. It will therefore be used here as a standard to assess effectiveness in meeting manpower needs.

The ten occupations in Kentucky with the highest manpower needs are shown in Table 26. Included are occupations related to clerical and secretarial work, foods, nursing, and retailing. Table 27 lists the major occupational categories in order of demand and the five highest demand occupations within each. (For other occupations see Appendix A.)

Table 28 indicates enrollments as a percentage of manpower demand for each of the major occupational areas. This table indicates three areas—agriculture, business and office work, and trade and industry—showing large over-enrollments. These over-enrollment figures primarily represent secondary students (see Appendix B). Substantial under-enrollments are indicated in three areas—distributive education, health occupations, and home economics. Under-enrollments would be expected (except in extremes) if one assumes that training opportunities exist outside of the vocational education system and also contribute to meeting the need. Over-enrollment such as 11.5 times the demand in agriculture and 1.7 times the demand in distribution seem extreme.

Returning to Table 26, it appears that only one of the ten occupations, accounting/management, has enrollments approaching manpower demand. The clerical enrollment is two and one-half times as great as the estimated manpower need. Other occupations indicate significant under-enrollments. Quantity foods indicates an enrollment of only one percent of the estimated need. Textile production and merchandising have enrollments of only three per-

TABLE 26

TEN OCCUPATIONAL PROGRAMS WITH HIGHEST MANPOWER DEMAND
FY 1978

OCCUPATION	MANPOWER DEMAND *	ENROLLMENT		COMPLETIONS	
		NUMBER	PERCENT OF DEMAND	NUMBER	PERCENT OF DEMAND
Clerical	6,350	16,079	253	2,901	46
Merchandising	6,150	209	3	113	2
Steno/Clerical	4,940	9,083	217	1,986	40
Accounting/Mgt.	4,840	3,352	69	815	17
Quantity Food	3,640	46	1	18	.5
Textile Prod.	2,670	82	3	19	.7
Food Distribution	2,560	596	23	385	15
Practical Nursing	2,500	779	35	440	18
Nursing Assistant	2,500	358	19	239	10
Retailing	1,690	601	7	180	11

SOURCE: Bureau of Vocational Education, Enrollments, Completions and Placement
of Vocational Education Students for 1977-78 School Year.

NOTE: *Manpower demand means need as reported by Bureau of Vocational Education.

TABLE 27

FIVE PROGRAMS WITH HIGHEST ENROLLMENT
IN EACH OCCUPATIONAL CATEGORY

FY 1978

OCCUPATION AREA	DEMAND	ENROLLMENT	COMPLETION	RELATED EMPLOYMENT
TRADE AND INDUSTRY				
Auto Mechanics	1230	4199	1105	654
Welding	450	3447	1142	741
Carpentry	880	2787	875	551
Machine Shop	220	1655	560	393
Electricity	420	1652	650	388
BUSINESS AND OFFICE				
Clerical	6350	16079	2901	1301
Steno/Secretarial	4940	9083	1986	1117
Accounting/Management	4840	3352	815	327
Data Processing	1030	585	246	103
Other		122	22	6
DISTRIBUTION				
Other		7655	1208	721
Retailing	1690	601	180	88
Food Distribution	2560	596	385	102
Food Service	480	369	157	95
Advertising Services	500	250	7	4
HEALTH				
Other		1886	1229	209
Registered Nurse	850	893	324	315
Practical Nurse	2500	779	440	396
Nursing Assistant	2500	358	239	191
Medical Assistant	310	63	37	35
HOME ECONOMICS				
Food Services	370	1113	349	146
Child Care	930	672	252	62
Clothing Services	1100	139	30	5
Home/Community Serv.	1460	47	2	2
Home Furnishings		42	17	3
AGRICULTURE				
Agribusiness/Other		11773	179	122
Production	680	3193	1251	702
Horticulture	620	1853	511	167
Mechanics	60	1020	554	317
Resources	50	66	18	8
TECHNOLOGY				
Electronics	240	622	124	75
Civil		119	34	30
Communications		46	21	19
Mechanical	210	37	19	16
Chemical	240	19	12	0

SOURCE: Bureau of Vocational Education, Enrollments, Completions and Placement of Vocational Education Students for School Year 1977-78.

TABLE 28

VOCATIONAL EDUCATION ENROLLMENTS, COMPLETIONS AND
EMPLOYMENT AS PERCENTAGE OF MANPOWER DEMAND

FY 1978

Occupational Area	Enrollments as % of Demand	Completions as % of Demand	Related Employment as % of Demand
Agriculture	1153.6	166.8	86.2
Distribution	63.8	14.6	7.5
Health	58.5	33.2	17.2
Home Economics	52.2	16.8	5.6
Business & Office	170.3	34.8	16.6
Technology	94.5	23.2	15.5
Trades & Industry	118.3	35.6	22.2
TOTAL	132.2	32.0	17.2

SOURCE: Kentucky Department of Education, Bureau of
Vocational Education.

cent of need. For the remaining occupations in this table, enrollments range from seven percent to 217 percent of manpower demand.

An inspection of Table 27 indicates several other areas of over and under-enrollment. Some significant areas of over-enrollment are auto mechanics, carpentry, registered nursing, agricultural production, horticulture, agricultural mechanics, and electronics technology. Areas of under-enrollment include all five of the highest demand areas under distribution, four areas of health, four areas of home economics and four areas of technology. It appears from this data that the highest areas of demand and the highest areas of enrollment do not coincide. Table 29 displays the ten highest areas of enrollment. Three of these areas—agribusiness/other, distribution/other, and health/other—are not specific occupational programs. The majority of enrollees in these areas are secondary students. The areas themselves are composed mainly of level one and level two courses designed to give the student a general background, educationally and experientially, in the particular occupational area. The seven remaining areas of enrollment are specific occupational programs.

Comparing the occupations in Table 26 (highest demand) with those in Table 29 (highest enrollment), we can see that only three of the highest enrollment occupational programs—clerical, steno/secretarial, and accounting/management—are included in the ten highest demand occupations. It is apparent from this comparison that manpower need is not the primary factor influencing either the offering of programs or enrollment in programs. In fact, demand seems to have little influence on enrollment, as indicated by the range of enrollment as a percentage of demand—sixty-nine percent to 766 percent—for the ten highest enrollment programs.

Table 30 presents the five occupations of highest enrollment in each of the seven major occupational categories. The data in this table reinforces the conclusion that demand and enrollment show little direct relationship. This table also indicates that the two occupational areas showing the greatest over-enrollments in terms of demand are agriculture and trade and industry. The remaining categories indicate under-enrollments in terms of demand, with the exception of five specific occupations—food services, electronics, technology, clerical, steno/secretarial, and registered nursing.

Program enrollments are useful in evaluating planning, guidance and program relevancy to manpower need. Completion rates are useful in determining the amount of manpower supply actually created. An inspection of the completion rates in Table 28 indicates that over-training for estimated need is found only for agriculture (166.8 percent). For the remaining occupational areas under-training is apparent. The range of completions as a percentage of demand is from 14.6 percent to 35.6 percent. One indication of the extent to which manpower needs are being met is a comparison of manpower need to the related employment rate. This rate is one indicator of the number of trainees absorbed into the labor market. Related employment as a percentage of manpower demand (displayed in Table 28) indicates that the highest percentage of absorption is in the area of agriculture (eighty-six percent), this group being primarily secondary students. The lowest area of absorption is in home economics (7.5 percent). The overall state average related employment rate is 17.3 percent. The estimated total need is 67,238 while the actual supply is 11,601. This comparison suggests that the effect of vocational education training on actual manpower needs is relatively small.

TABLE 29

TEN OCCUPATIONAL PROGRAMS WITH HIGHEST ENROLLMENTS
FY 1978

OCCUPATION	MANPOWER DEMAND	ENROLLMENT		COMPLETIONS	
		NUMBER	PERCENT OF DEMAND	NUMBER	PERCENT OF DEMAND
Clerical	6,350	16,079	253	2,901	46
Agribusiness I & II	N/A	11,773		N/A	
Steno/Secretarial	4,940	9,083	184	1,986	40
Distribution I & II	N/A	7,655		N/A	
Welding	450	3,447	766	1,142	254
Accounting/Management	4,840	3,352	69	815	17
Agricultural Production	680	3,193	470	1,251	184
Carpentry	880	2,787	317	875	99
Health Careers	N/A	1,886		N/A	
Horticulture	620	1,853	299	511	82

SOURCE: Bureau of Vocational Education, Enrollments, Completions and Placement
of Vocational Education Students for School Year 1977-78.

N/A: Not Applicable.

TABLE 30

FIVE PROGRAMS WITH HIGHEST OCCUPATIONAL
DEMAND IN EACH OCCUPATIONAL CATEGORY
FY 1978

OCCUPATIONAL AREA	DEMAND	ENROLLMENT	COMPLETION	RELATED EMPLOYMENT
TRADE AND INDUSTRY	20730	24517	7383	4606
Quantity Foods	3640	46	18	0
Textile Production	2670	82	19	3
Auto Mechanics	1230	4199	1105	654
Cosmetology	900	743	187	148
Carpentry	880	2787	875	551
BUSINESS AND OFFICE	17160	29221	5970	2854
Clerical	6350	16079	2901	1301
Steno/Secretarial	4940	908	1936	1117
Accounting/Management	4840	3352	815	327
Data Processing	1030	585	246	103
DISTRIBUTION	15890	10132	2322	1185
Merchandising	6150	209	113	63
Food Distribution	2560	596	385	102
Retailing	1690	601	180	88
Personal Services	1090	101	47	29
Hotel and Lodging	600	20	5	3
HEALTH	7128	4167	2368	1224
Practical Nurse	2500	779	440	396
Nursing Assistant	2500	358	239	191
Registered Nurse	850	893	324	315
Medical Lab Assistant	360	12	6	6
Medical Assistant	310	63	37	35
HOME ECONOMICS	3860	2013	650	218
Home/Community Service	1460	47	2	2
Clothing Services	1100	139	30	5
Child Care	930	672	252	62
Food Service	370	1113	349	146
AGRICULTURE	1560	17981	2587	1345
Production	680	3193	1255	705
Horticulture	620	1853	511	167
Supplies/Services	150	61	41	29
Mechanics	60	1025	558	320
Resources	50	66	22	11
TECHNOLOGY	910	860	211	141
Electronics	240	622	124	75
Chemical	240	19	12	0
Mechanical	210	37	19	16
Data Processing	120	0	0	0
Electrical	80	0	0	0

SOURCE: Bureau of Vocational Education, Enrollments, Completions and Placement of Vocational Education Students for 1977-78 School Year.

Status of Program Completers. A follow-up survey of program completers and early leavers obtaining related employment is conducted approximately nine months after completion. The results of this follow-up (see Table 31), conducted by occupational teachers, seem to have some positive indications. The unemployment rate of completers is only four percent, while the overall employment rate is sixty-six percent and the related employment rate is fifty-four percent. An additional eighteen percent of the program completers are continuing their education; however, there is no indication as to the relatedness of this education to their prior occupational training.

Close inspection of the related employment rates reveals that the type of student produces some large variances within different occupational categories. The overall average for secondary students is forty-six percent, for adult students it is seventy-two percent, and post-secondary is ninety-one percent. In all categories secondary students have the lowest related employment rates, ranging from twenty-nine percent to fifty-nine percent. Adult and post-secondary students demonstrate higher placement rates, from fifty-six to ninety-six percent (with the exception of nineteen percent in "distribution"). In all categories, except for agriculture, post-secondary students have somewhat higher related employment rates than adult students. The range for post-secondary students is from seventy-five to ninety-six percent, while the range for adult students is from fifty-six to eighty-seven percent (with one extreme of nineteen percent). However, the higher rates for post-secondary students could be the result of the widely differing frequency sizes used to compute the rates for adults and post-secondary students. This factor could also explain the rate differences found for secondary students if there were not three categories, "business and office," "trade and industry" and "all programs," in which the enrollment figures compared are in the hundreds and thousands and still indicate much lower secondary rates.

Unemployment rates also indicate that secondary students do not do as well as adult and post-secondary students. Secondary unemployment ranges from zero to nine percent, with an average of five percent. Post-secondary unemployment ranges from zero to seven-tenths of a percent, while adult unemployment ranges from zero to nine percent. The average adult unemployment rate is three percent; the average post-secondary rate is only four-tenths of a percent.

Table 31

VOCATIONAL EDUCATION STUDENT FOLLOW-UP DATA
COMMONWEALTH OF KENTUCKY
FY 1978

OCCUPATIONAL PROGRAM	PROJECTED MANPOWER	FOLLOW-UP							NUMBER FOLLOWED (%) ^c
		FULL-TIME RELATED EMPLOYMENT (%) ^c	OTHER EMPLOYMENT (%) ^c	CONTINUING EDUCATION (%) ^c	UNEMPLOYED (%) ^c	OTHER (%) ^c	UNKNOWN (%) ^c	ALL EMPLOYED (%) ^c	
AGRICULTURE									
Secondary		1,313 (52)	465 (18)	532 (21)	57 (2)	67 (3)	113 (4)	1,778 (70)	2,434 (96)
Post-Sec.		6 (75)	0 (0)	2 (25)	0 (0)	0 (0)	0 (0)	6 (75)	8 (100)
Adult		26 (81)	4 (13)	2 (6)	0 (0)	0 (0)	0 (0)	30 (94)	32 (100)
Subtotal	1,560	1,345 (52)	469 (18)	536 (21)	57 (2)	67 (3)	113 (4)	1,782 (69)	2,474 (99)
DISTRIBUTION									
Secondary		1,083 (59)	133 (7)	355 (19)	53 (2)	167 (9)	84 (4)	1,216 (66)	1,751 (95)
Post-Sec.		10 (77)	0 (0)	0 (0)	0 (0)	0 (0)	3 (23)	10 (77)	10 (77)
Adult		92 (19)	73 (16)	5 (1)	20 (4)	31 (7)	253 (53)	165 (35)	221 (47)
Subtotal	15,890	1,185 (51)	206 (9)	360 (16)	73 (3)	198 (9)	340 (15)	1,391 (60)	1,982 (85)
HEALTH									
Secondary		157 (47)	137 (12)	647 (57)	28 (2)	89 (8)	82 (7)	294 (26)	1,058 (93)
Post-Sec.		331 (96)	1 (3)	5 (1)	2 (7)	0 (0)	6 (2)	332 (96)	339 (98)
Adult		736 (83)	26 (3)	33 (4)	2 (1)	26 (3)	53 (5)	762 (86)	830 (94)
Subtotal	7,128	1,224 (52)	164 (7)	685 (29)	39 (2)	115 (5)	141 (6)	1,386 (47)	2,227 (94)
HOME ECONOMICS									
Secondary		184 (30)	86 (14)	201 (33)	54 (9)	50 (8)	36 (6)	270 (44)	575 (94)
Post-Sec.		34 (87)	3 (8)	0 (0)	0 (0)	0 (0)	2 (5)	37 (95)	37 (95)
Adult		218 (34)	89 (14)	201 (31)	54 (8)	50 (8)	38 (6)	307 (47)	612 (94)
Subtotal	3,860								
BUSINESS & OFFICE									
Secondary		2,218 (46)	422 (9)	1,234 (25)	314 (7)	310 (6)	357 (7)	2,660 (55)	4,518 (93)
Post-Sec.		90 (79)	1 (1)	21 (18)	0 (0)	1 (1)	1 (1)	91 (80)	113 (99)
Adult		546 (56)	105 (11)	34 (3)	93 (9)	45 (5)	158 (16)	651 (66)	823 (840)
Subtotal	17,160	2,854 (48)	548 (9)	1,289 (22)	407 (7)	356 (6)	516 (9)	3,402 (57)	5,454 (91)
TECHNOLOGY									
Secondary		16 (29)	17 (31)	10 (18)	0 (0)	4 (7)	8 (15)	33 (60)	47 (85)
Post-Sec.		125 (81)	18 (12)	4 (2)	4 (2)	0 (0)	5 (3)	143 (92)	151 (97)
Adult		141 (67)	35 (17)	14 (7)	4 (2)	4 (4)	13 (6)	176 (83)	198 (94)
Subtotal	910								
TRADE & INDUSTRY									
Secondary		2,028 (49)	965 (23)	549 (13)	231 (6)	116 (3)	244 (6)	2,993 (72)	3,889 (94)
Post-Sec.		2,606 (80)	145 (4)	181 (6)	33 (1)	49 (2)	236 (7)	2,751 (85)	3,014 (93)
Adult		4,632 (63)	1,110 (15)	730 (10)	264 (4)	165 (2)	480 (7)	5,744 (78)	6,903 (93)
Subtotal	20,730								
ALL PROGRAMS									
Secondary		6,999 (46)	2,245 (15)	3,528 (23)	737 (5)	803 (5)	924 (6)	9,244 (61)	14,272 (94)
Post-Sec.		437 (91)	28 (6)	28 (6)	2 (4)	1 (2)	10 (2)	439 (92)	470 (98)
Adult		4,165 (72)	374 (6)	259 (5)	152 (3)	151 (3)	707 (12)	4,539 (78)	5,108 (88)
TOTAL	67,238	11,601 (54)	2,621 (12)	3,815 (18)	898 (4)	955 (4)	1,641 (8)	14,222 (66)	19,850 (92)

SOURCE: Kentucky Department of Education, Bureau of Vocational Education

^aPercentage based on number of enrollees.

^bDefinition of related was individually determined by respondent.

^cPercentage based on number of completers shown in Table 23.

Program Planning

The State Board of Education is particularly important in Kentucky because of the objectives of vocational education are met by all vocational facilities serving overlapping populations of students.

Interagency Coordination

Coordination of secondary programs is not a major problem in Kentucky. The Department for Elementary and Secondary Education governs local school programs and the Department for Occupational Education governs state-operated schools. However, the allocation and distribution of state and federal funds, as well as program and construction approval, fall to the Bureau of Vocational Education. Thus coordination of efforts results from the design of the system.

The Governor and the General Assembly of Kentucky have expressed the concern that duplication of efforts by the state vocational technical schools and the colleges and universities was an avoidable waste of economic resources. In creating the Board of Occupational Education, Kentucky's lawmakers allowed the Board's sphere of responsibility to extend to occupational programs through the associate degree level, which placed the Board of Occupational Education and the Council on Higher Education in the position of reviewing an overlapping set of programs. The bounds of responsibilities for each board are defined, however. For associate degree level and below programs, the Occupational Board reviews all new requests for an *occupational-technical type*, evaluates them on the basis of manpower need, and approves or disapproves them. Disapproval by the Board is final [KRS 156.116(10)(d)]. The Council on Higher Education retains its responsibilities regarding review, approval and regulation of programs in institutions of higher education.

The statutes describing the relationship between the Board of Occupational Education and the Council outline the process to be used in developing new program requests. According to KRS 156.116(10)(a), development of new occupational programs at the post-secondary level are to be a joint effort between the community college or university requesting the program and the Department for Occupational Education. This approach should reduce the areas of duplication and overlap that may exist, should insure need through an analysis of current services, and should provide the mechanism for developing a concerted effort toward serving the identified need.

The Board and the Council have outlined procedures to be followed by their institutions in the development of new occupational programs serving post-secondary or adult students. These procedures follow the intent of the statutes in establishing the requirement for joint consultation and approval. It appears, however, that these procedures are to some degree only a formalization of an existing informal practice. Both vocational regional administrators and community college administrators report that joint efforts existed in some form for several years. A list of combined strategies between community colleges and state vocational facilities supplied by the Community College System indicates at least one cooperative activity involving eleven of the thirteen community colleges. These activities include mutual use of classroom space, equipment, or personnel, joint programming, and joint planning of new facilities.

Although the Council and Board have been able to establish the procedures to be

followed by facilities under their responsibility, they have not been able to do the same for themselves. After a year of discussions, each group has outlined the procedures it believes should be followed but the two have not been able to agree on a particular process.

According to the Council on Higher Education's proposal (Appendix C), a request would come from an institution to the Council, who would then forward it to the Board. The Board would act on the proposal on the basis of manpower need. If the program was not approved by the Board, the Council would be notified and would notify the institution. If the program were approved, the Council would initiate its review process.

In the process proposed by the Board of Occupational Education (Appendix D), the proposal would be submitted by the institution to the Council. The Council would review the proposal and approve or disapprove it, based upon the Council's own criteria. Approved programs would then be sent from the Council to the Board for a review based on manpower need. The Board would then inform the Council of its decision and the Council would inform the institution.

The question preventing agreement on a procedure has to do with which body has final review authority. The statutes do not actually give "final approval" power to anyone, but do give "final disapproval" authority to the Board [KRS 156.116(10)(d)]. The Council, in the minutes of its quarterly meeting of April 11, 1979, indicates that the approval process it uses is based on appropriateness to the institution, capability of the institution to offer the program, the offerings in other nearby institutions, financial resources of the institution, manpower need and student interest. If the new program involves construction, the approval process is much lengthier and costlier. Naturally, the Council is hesitant to carry out this lengthy procedure, only to have a program disapproved by the Board.

The major effect of not having a review procedure appears to be abandonment of efforts to develop one. Both the Council and the Board have maintained in hearings of the Program Review and Investigation Committee that the issue of final approval power must be resolved by the General Assembly or the Governor before a procedure can be established.

The lack of a review procedure has had no effect on actual instruction or on institutional operations because no new programs have been requested. However, six new occupational programs are in various stages of proposal development and will be submitted for approval in the next six months.

According to statute the Board of Occupational Education has final disapproval power. In order to exercise this power responsibly, the Board must review the program that is ready to be implemented rather than a proposed program which may, after approval by the Board, be subjected to reviews and possible amendments by another independent body.

The type of procedure needed is one which presents the Board with a program proposal, as closely as practicable, to the program to be implemented. Since the Council has a large number of criteria related to its own regulations, it should request approval by the Board only for programs that meet the Council's criteria. However, all decisions on manpower need should be requested by the Council before critical reviews requiring large expenditures. The procedure should recognize that any proposal approved by the Board which undergoes subsequent modifications impacting on the manpower needs addressed, the population served, or the instructional content would require Board approval of the modified program. A procedure based on this approach would permit the Board to review programs requiring construction at a point

prior to engaging in costly engineering and architectural expenses. At the same time it would provide the Board with a mechanism of insuring that changes resulting from a later review do not result in an unacceptable program upon implementation.

Recommendations

1. The General Assembly should review the statutes defining the powers of the Council on Higher Education and the Board of Occupational Education. The General Assembly should act to clarify the powers of the Board and the Council regarding occupational programs in community colleges and universities, if necessary.

2. The two agencies should be instructed to devise a procedure for approving new programs at the post-secondary level to serve in the interim until the problems are resolved.

Needs Assessment and Planning

The Kentucky Occupational Information Coordinating Committee is currently developing a periodic reporting procedure to compile data on the sources and quantities of manpower training in the state. In the future the Coordinating Committee will be developing procedures for gathering more accurate data on Kentucky's manpower needs.

In FY 1972, the Bureau of Vocational Education began the development of the Kentucky Information for Training and Education System (KITES). This system was to provide program planning information, program management information, and career information for the state and for each region. KITES was conducted jointly with the Department of Economic Security, the Kentucky Program Development Office, the Department of Commerce, the Department of Personnel, the Comprehensive Health Planning Unit of the Department for Human Resources, the Cooperative Extension Service, and the State Office of Economic Opportunity. KITES was funded in FY 1972 by an Economic Development Administration (EDA) grant of \$83,334 matched with \$28,666 in state funds. A second year extension grant of equal value was appropriated by EDA in FY 1973. According to EDA records this second grant was not utilized by the state and was withdrawn in December, 1979. Conversations with the Bureau of Vocational Education staff have failed to verify this fact or provide the reason this project was discontinued.

Patterned after the Oklahoma Training Information System, KITES was acknowledged as a national model program. It was designed to provide the Bureau of Vocational Education with a wide array of data. For planning purposes KITES collected information on manpower demand and manpower supply for each county and region of the state. It was designed to continue gathering this information through periodic surveys of business, industry and government within the state. KITES provided student follow-up information, including employment, wage rate and training relatedness. It provided detailed management information on facilities, equipment, personnel and enrollment. Finally, the system offered career information to students on occupations in demand within their region and occupational areas of interest.¹²

In FY 1974, portions of the KITES system were discontinued and other portions were modified. The manpower demand and supply surveys and the computerized student enrollment and follow-up system were discontinued. The facilities and equipment inventory is still maintained by the Division of Buildings and Grounds in the Department of Education. The

Occupational Information Unit created to administer KITES currently operates in the Bureau of Vocational Education. Its responsibilities involve student enrollment and follow-up data collection and publication of the Regional Planning Manual.

Current needs assessment activities by the Bureau of Vocational Education consist of compiling and reclassifying manpower data supplied by the Bureau of Manpower Services. This data is incorporated into the Regional Planning Manual and sent to local administrators. Included in this planning manual are a variety of general population descriptors (some regional and others statewide), commuting pattern data, and statewide industrial and manufacturing lists.

One major weakness of this manual is the manpower supply information provided. The supply information represents only vocational training provided by the Bureau of Vocational Education and Comprehensive Employment and Training programs. Information about the location and types of private occupational training programs has not been provided, although a list of all licensed proprietary schools, their program offerings, and limited enrollment data could be obtained from the State Board for Proprietary Education.

Despite the planning manual's weakness, a telephone survey of thirty-seven principals and coordinators of state vocational technical schools and area vocational education centers, indicated that eighty-six percent (31) of these administrators found this regional planning manual useful. Survey respondents commented that more accurate and localized manpower data would be valuable. Some of the other needs suggested were:

1. Earlier receipt of needs assessment data;
2. More long-range plans for training needs;
3. More localized needs projections;
4. Unemployment rate reports; and
5. More localized breakdowns of regional information.

Regional offices of the Bureau of Vocational Education are responsible for reviewing program plans submitted by the area centers and the local school districts. Review and approval of these plans are based on information collected by the local administrators indicating regional manpower needs, student employment rates, and student interest. Local administrators are to complete a job market analysis and a discrepancy analysis. However, only a narrative summary of these is included in the planning package submitted to the Bureau.

According to the thirty-seven principals and coordinators of vocational facilities surveyed by telephone, forty-two percent (15) do not receive any planning information from their regional office other than the Regional Planning Manual. Eighty-six percent (31) of these administrators responded that they collect manpower data at their local level.

Methods reportedly used to collect manpower and student needs data vary from facility to facility. These methods include informal surveys or interviews, personal contacts with business and industry during the year, feedback from advisory council members, and formal surveys. Although needs assessment activities are conducted at the local level, they are not coordinated, standardized, or reported to the Bureau of Vocational Education for use in the overall planning process. Without reliable data, the state's needs cannot be adequately identified and program priorities cannot be established to guide local planning efforts. In the past, the Annual Program Plan developed by the Bureau of Vocational Education did not indicate priority pro-

grams. The 1980 Annual Plan is the first plan indicating occupational programs needing more emphasis on termination.

Recommendation

The Bureau of Vocational Education should review its current system for collecting local manpower needs to determine ways in which local collection efforts can be improved and standardized to provide state planners with additional data indicating statewide manpower needs.

Program Management

To ensure that the various vocational education programs and facilities located across the state are in compliance with federal and state operating principles, and to maintain efficient operations, adequate management mechanisms are necessary. The areas of concern include auditing and evaluation activities, uniform operating procedures and timely enrollment data.

Oversight

Connected with the management division, but not under its control, is the Audit Unit of the Division of Finance for Vocational Education. This unit is responsible for conducting procedural compliance audits. These audits are to serve as a means of keeping management informed about existing procedural problems. According to Kentucky Administrative Regulations, (705 KAR 2:090), audits are to be performed every six months or at the discretion of the Bureau head (see Table 32 for list of audits). Until recently the audit unit had only the services of one part-time audit coordinator, severely limiting the scope and number of audits performed. During the period FY 1973 through FY 1976, no internal audits were performed. One region has had no internal audits since FY 1972 and three regions have had no internal audits since FY 1978.

An independent auditing firm is under contract with the BVE to audit two vocational regions per year. One region has had no independent audits since FY 1970 and two regions have had no independent audits since FY 1976. The combination of internal and independent auditing activities currently employed results in an audit cycle of three to four years per facility. Even at this rate, full audits of all procedures are not performed. Most notably, the areas of supplies, equipment, and personnel are not routinely audited. Problem audits are conducted at the request of the Bureau of Vocational Education. However, the audit division does not conduct follow-up visits to determine the extent to which problems have been rectified. The management division of the Bureau of Vocational Education has not, until recently, performed any form of routine management assistance audits of the regional facilities under its control.¹³ Division personnel characterize program management activities as primarily responding to problems rather than serving in a consultative or management manner.¹⁴ Additionally, the Director of Program Management indicates that lack of management activity extends to the relationship between the regional business managers and the area center personnel under their direction. In FY 1974, the Director of Fiscal Control and Financial Accounting of the Department of Education directed the Bureau's regional business managers to audit state vocational technical schools on a monthly basis and to audit area centers on a biannual basis.

TABLE 32

LIST OF AUDITS PERFORMED BY
VOCATIONAL EDUCATION REGION
COMMONWEALTH OF KENTUCKY
FY 1970 - FY 1980

REGION	INTERNAL AUDIT DATES	OTHER STATE AGENCY AUDIT DATES	INDEPENDENT AUDIT DATES
PURCHASE	4/79, 11/78, 6/77, 4/72	1/80, *3/76	5/77, 11/70
PENNYRILE	12/79, 6/70	1/80, 3/76	5/76, 2/74
GREEN RIVER	2/78, 6/71, 6/70	1/80, 3/76	5/76
BARREN RIVER	10/79, 11/71, 4/71, 6/70	1/80, 3/76	5/78
ELIZABETHTOWN	10/78, 6/77, 5/71	1/80, 3/76	5/75
JEFFERSON	12/79, 10/78, 8/76, 5/71	1/80, 3/76	5/79
NORTHERN KENTUCKY	11/77, 11/71	1/80, 3/76	9/75, 7/70
BUFFALO TRACE	3/78	1/80, 3/76	6/79, 6/73
FIVCO	11/71	1/80, 3/76	11/75, 6/74
BIG SANDY	10/78, 6/77, 10/71	1/80, 3/76	11/75, 6/74
KENTUCKY RIVER	10/77, 9/76, 11/71	1/80, 3/76	6/78
CUMBERLAND VALLEY	1/79, 4/77, 12/76, 10/71, 6/71	1/80, 3/76	5/75
LAKE CUMBERLAND	10/77, 10/76, 12/71, 5/71	1/80, 3/76	5/77
BLUEGRASS	12/79, 10/79, 7/79, 11/78, 5/71	1/80, 3/76	8/70
BUREAU		1/80, 3/76	YEARLY SINCE FY 1970

SOURCE: DIVISION OF FINANCE FOR VOCATIONAL EDUCATION, DEPARTMENT OF EDUCATION.

* THIS AUDIT BY THE STATE AUDITOR OF PUBLIC ACCOUNTS IS IN PROGRESS.

Although audits by regional personnel are not performed, facilities are periodically visited. According to a survey of thirty-six vocational facilities, problem discussion visits from regional business managers to state vocational schools (generally located in the same building complex as the regional office) average seven visits to each school in six months, ranging from zero to twelve visits per school. Business manager problem-oriented visits to area centers average approximately three per six-month period, with a range of zero to twelve visits per center. Regional directors demonstrate a higher visitation record. Directors visited state schools an average of fourteen times per school in six months (range of three to twenty-four) and area centers an average of three visits per six-month period (range of zero to six). Visits by the Bureau's Division of Program Management and Division of Program Development staff average four visits per year to state vocational schools (range of zero to twelve) and two visits per year to area centers (range of zero to four).

In FY 1977 and FY 1978, the Planning and Evaluation Unit of the Bureau of Vocational Education piloted a program evaluation and accountability system. This system was implemented statewide in FY 1979. Its purpose, according to the Bureau, is to provide regional and school staff with feedback on the quality of their programs and areas for improvement. It is not designed as an administrative tool to judge personnel performance or to impact program funding levels.

The program evaluation includes a self-study (with validation by state office personnel) related to program implementation, building administration, and regional administration. The purpose of the building and regional administration instruments is to "determine the availability and accessibility of vocational education in specific institutions and the vocational region."¹⁵ The purpose of the program instrument is to determine the "quality of each vocational program in an institution."¹⁶

Since its inception the review process has been conducted in sixty-eight schools in Kentucky (as of FY 1979). The process itself requires a team of staff members from the Planning and Evaluation Unit, the Division of Vocational Program Development, The Division of Vocational Program Management and the Division of Vocational Supporting Services to visit each facility under review for a period of one to two days. Preliminary results compiled by the Planning and Evaluation Unit of the BVE indicate that the following conditions generally prevail:

1. Organized placement and follow-up activities generally do not exist;
2. There is almost no evidence of organized activities to educate males and females to the opportunities available in non-traditional fields, or of organized recruitment activities; and
3. Teachers do not seem to identify the job competencies or jobs for which their curriculum prepares the student.

Auditing by state agencies outside the Bureau of Vocational Education has been minimal. The Department of Finance audit staff conducted only one audit involving the Bureau in the last ten years. This was an imprest cash audit of the Department of Education in FY 1976.

The State Auditor of Public Accounts office has also conducted only one audit involving the Bureau, the foundation program audit conducted in FY 1977. Currently, the Auditor of Public Accounts office is conducting a financial audit of the Department of Education which

will include the Bureau of Vocational Education. The federal government has not performed an audit of the Bureau in the last five years. However, current federal regulations will require financial, procedural, program and compliance audits by the federal government once every five years. The current audit scheme employed for internal and external auditing, incidentally, gives only minor attention to personnel procedures, supply control procedures, and equipment inventory and disposition procedures.

Periodic reviews of supply control procedures and equipment procedures are important. Table 33 indicates the supplies and equipment on hand in state-operated vocational facilities at the end of three fiscal years. In FY 1979 over \$2.5 million in supplies and \$29 million worth of equipment were recorded. Since these amounts are recorded at the end of the fiscal year and, coincidentally, the school year, they probably understate the total amount of supplies and equipment possessed within the year. With large amounts of supplies and equipment widely disbursed and under the supervision of a large number of personnel, it is essential to have periodic reviews to insure proper usage.

TABLE 33
EQUIPMENT AND SUPPLIES ON HAND
BUREAU OF VOCATIONAL EDUCATION FACILITIES
COMMONWEALTH OF KENTUCKY
FY 1977 - FY 1979

YEAR	Expendable Supplies	Equipment \$50-\$300	Equipment \$300 or more
1977	\$1,877,738	\$5,394,839	\$17,740,608
1978	\$2,155,110	\$5,964,462	\$19,887,736
1979	\$2,679,493	\$6,632,780	\$23,064,639

SOURCE: Department of Education, Division of Buildings and Grounds.

Recommendations

1. The Kentucky State Department of Education should take steps to increase the frequency and scope of internal auditing activity within the Bureau of Vocational Education. At a minimum, the Bureau should conduct biennial procedural and operational audits of all facilities. These audits should cover all areas, including supplies, equipment and personnel.

2. The Department of Education should review the current organization and practices of the Bureau of Vocational Education to determine the best utilization of personnel in insuring proper management control over operations and programming.

3. The Bureau of Vocational Education should take steps to increase the effectiveness of its current management staff, so that it may perform in a management-oriented rather than a problem-oriented fashion.

4. Routine management audit procedures should be developed to insure efficient operations at the state and regional levels.

It is not anticipated that these recommendations will require any additional allocation of funds. Reviewing current organization and practices and increasing the effectiveness of the current management are functions of administration currently funded and should not necessitate new expenditures.

Increasing auditing activities should not require new expenditures, but merely a fuller use of available resources. During the course of the present study, a second person with part-time (forty percent) auditing responsibilities was employed by the Department, bringing the total auditing staff to two persons with part-time (forty percent) auditing activities. According to the Division of Finance for Vocational Education in the Department of Education, each person has 750 working hours (based on 37.5 hours for fifty weeks) allocated for auditing activities per year. Within the current scope of audits one person auditing a region requires 42.3 working hours for the audit time and travel. At the current rate of three audits per year this amounts to 126.9 working hours for audit field work.

The Division of Finance for Vocational Education indicates that an expansion of auditing to include supplies, equipment and personnel would increase per audit time to 106.6 hours. The total working hours required for seven audits per year (one-half the total number of vocational regions) would be 746.2 working hours. With two persons engaged in auditing, a total of 1,500 working hours is available for auditing activities. If 746.2 of the 1,500 available hours are used for travel and field work, this leaves 753.8 total working hours, or 107.7 working hours per audit, for reporting time. Three weeks (one and one-half weeks per person) reporting time does not seem an unreasonable time frame for reporting. Furthermore, actual reporting time may be greater if two persons working cooperatively on an audit can accomplish that audit in less time than a single auditor.

Operating Procedures and Policies

A major management problem in the Bureau is the lack of a current procedures and policies manual for regional and area administrators. The last manual compiled was issued in FY 1973, prior to a complete restructuring of federal vocational laws and a complete restructuring of the Department of Education.

Of thirty-seven vocational school administrators polled, forty-six percent considered the lack of an up-to-date manual a problem in performing their administrative duties. It is likely that the lack of this policies and procedures manual contributes to the overwork and to the "problem orientation" characterizing the Bureau of Vocational Education's program management staff. Whenever an administrator has a problem or question related to a procedure or policy, he contacts the regional office or the Bureau directly. This practice results in a daily stream of requests from throughout the state to the Division of Vocational Program Management staff for information concerning proper administrative actions.

Recommendation

The Bureau of Vocational Education should seek to revise its 1974 Procedure and Policies Manual to provide regional and school administrators with an up-to-date, central reference source.

Student Accounting System

For the last four years, the Kentucky Advisory Council for Vocational Education has listed as a major problem in vocational education the lack of accurate and timely student enrollment, completion, and follow-up data. This problem is acknowledged by the Bureau of Vocational Education as a weakness affecting its planning and management processes. As it currently exists, the student accounting system used by the Bureau of Vocational Education is a hand-tabulation method. Under this system, information on final enrollments, completions, and follow-up is not available until four to six months after collection. This delay forces the Bureau to rely heavily on projected data for planning and accountability.

The lack of an accurate and timely student account system has reduced the efficiency of the Bureau of Vocational Education in two important areas, program planning and program management. Hand-tabulation is slow and severely limits the amount of information that can be tabulated. Current federal student record forms require a wide range of information related to the program participants, such as grade level, program level, handicapping condition, termination status, completion status, and follow-up status. Increasing federal requirements for more discrete information on program enrollees will make the tabulation of available student data imperative. In order for the Bureau of Vocational Education to meet federal reporting requirements, and in order for this information to be available in time for program planning and evaluation, it is necessary for the Bureau to develop a computerized student information system.

The Program Planning and Evaluation Unit of the Bureau needs accurate and timely data on program enrollments, completions and follow-up. This information is necessary to fulfill federal reporting requirements as well as to provide data for effective program planning. An "Annual Program Plan" produced by this unit is designed to present data relevant to the operations of vocational education. Under the limitations of the current data collecting system, many man-hours are spent compiling data for this plan that is, of necessity, no more than estimation.

The data provided in this plan should be usable by the Bureau, by the Board of Occupational Education, by vocational school administrators, and by other management oversight groups to evaluate the past performance of the vocational education system. Additionally, the Bureau, the Board of Occupational Education, and local vocational program administrators need timely and accurate data for planning next year's programs. Obviously if the data is inaccurate or incomplete, neither evaluation nor planning can be performed reliably or effectively.

The lack of detailed information on current and historical program enrollments, completions, and follow-ups hinders program management too. One of the primary responsibilities of program management is monitoring class size to insure enrollments which are cost justifiable. Keeping up-to-date concerning class enrollments is essential, given the current size of the vocational education system in Kentucky. Under the current system it is not feasible to produce enrollment and termination reports more than annually. Presently it is not possible to have accurate current enrollment information without conducting a survey of all vocational facilities. This condition prohibits periodic management reviews of facility utilization to detect low enrollment programs.

A computerized student account system would provide data that is accurate and timely. It would provide up-to-date information on current and past enrollments, completions, and

terminations. It could provide a breakdown of terminations that would describe to managers and planners the number, location, grade and reason for these terminations. A computerized student accounting system would provide a profile of enrollments detailing the number of students in each program at each grade level in each institution and allow planners to estimate future enrollment patterns in each occupational program and institution. Finally, it would allow program managers to periodically review program enrollments and terminations so as to monitor program operations more effectively.

Recommendation

The Governor and the General Assembly should support the Bureau of Vocational Education efforts to obtain a computerized student information system that will meet the needs of the Bureau for timely and accurate data at reasonable costs to the state.

CONCLUSIONS

One major conclusion of this report relates both to special education and to vocational education. Existing financial accounting and program data systems do not permit adequate analyses of special and vocational education costs, nor do they promote sufficient accountability to serve program goals. The systems account for funds received and spent on personnel, general operations and capital outlay, but not as they are applied to separate programs. Only teacher salaries are attributed to specific programs. Because general operations and capital outlay expenditures are made through one account, actual disbursements for basic education, special education and vocational education cannot be determined.

The remainder of this section is divided into two parts. The first deals with education for exceptional children and the second with vocational education. The conclusions are drawn from all four chapters, but are not keyed to them.

Education for Exceptional Children

Kentucky, through statute, regulation, and Department of Education program planning, is committed to providing a comprehensive educational program for its exceptional school age children. It is also committed to the goal of serving all children under twenty-one years of age by 1990. To help implement these goals, "Standards for Programs for Exceptional Children" has been issued in draft form, but those standards need clarification.

Since 1970 Kentucky has demonstrated its commitment to educational programs for exceptional children. From the 1972-73 to the 1979-80 school year, classroom units for exceptional children have increased from 1,210 to 3,744. Legal analysis reveals that there are no significant conflicts between state laws and regulations and federal legislative, executive and judicial requirements, and that all major federal mandates may be implemented within the framework of Kentucky statutes and regulations.

Perhaps the greatest obstacle to serving all exceptional children is the apparent shortage of certified special education teachers. The Bureau of Education for Exceptional Children received requests from seventy-two school districts between February and July, 1979 for assistance in locating 187 special education teachers. A sample survey conducted one week before school started in August, 1979, indicated that many of these positions had not been filled. The result was that fewer special education units were operated by districts than were allotted under the foundation program for the school years 1976 through 1979.

The exact number of exceptional children in Kentucky is not known, although a comparison of state statistics with national incidence figures for various handicaps indicates that the Commonwealth is not far from the national average. Available data do not permit firm conclusions to be drawn as to what proportion of Kentucky's handicapped children have been located and identified. Similarly, precise evaluation of the success of child location and identification efforts cannot be made.

Additional program costs for serving children who are currently unknown to the system cannot be determined, since their total number and their specific program needs are, of course, unknown. The Child Tracking System being developed by the Bureau of Education for

Exceptional Children, in conjunction with a cost accounting system, should provide an improved basis for such cost calculations.

Other states have successfully implemented "weighted pupil formulas" to determine funding allocations on a per pupil basis. Such formulas depend upon an established cost accounting system. Education programs can then be managed to accommodate the needs of students in different programs. A weighted pupil funding system will promote a more equitable distribution of education funds, although at the cost of increased recordkeeping and reduced flexibility for the local districts.

A review of local district efforts to supplement support to special education through taxes and other means reveals a wide disparity in funding, even among districts of similar size. Actual expenditures devoted to special education cannot be verified under the present accounting system.

The Child Tracking System mentioned above should alleviate problems of locating handicapped students. By tracing the movement of pupils among school districts and educational institutions, it will provide more accurate counting and assist districts in applying for appropriate funds.

Small school districts, due to their small staff and number of client students, often do not apply for the federal funds available for educating exceptional children under P.L. 94-142 and P.L. 93-380. Some exceptional children are for this reason not receiving adequate services.

Vocational Education

Administration of vocational education programs is spread among several agencies and organizations, but the Board of Occupational Education is the statewide coordinating body for occupational education. The Board was created to prevent the duplication of programs among various agencies. Secondary program duplication is controlled directly by the Department of Education. Both the Bureau of Instruction and the Bureau of Vocational Education have responsibilities for secondary programs. However, the Bureau of Vocational Education reviews and approves all secondary programs, thus providing the mechanism for controlling duplication.

There is no established administrative control system to prevent duplication of occupational education programs between the community colleges and universities and the programs administered by the Bureau of Vocational Education.

Accurate and up-to-date information on vocational student enrollment is not available. Even though the Bureau of Vocational Education collects enrollment, completion, termination and follow-up data, it is tabulated by hand, a slow process and a hindrance to data analysis. Planning capabilities are therefore limited and decisions must frequently be based upon estimates. However, progress is being made toward implementing a Bureau management information system which will have the capability of automating data input, analysis and reporting.

State management oversight of vocational education facilities is problem-oriented. This "crisis approach" results in neglect of certain areas. Each region is audited an average of only once every three to four years. Some regions have gone even longer without an audit of any

type. Worse still, current audit procedures fail to address certain significant subjects, including personnel, supplies and equipment. For the most part current policies and procedures do little to help local facility managers understand the financial and administrative program regulations that affect their daily operations.

Financial information on occupational programs offered by universities and community colleges is not compiled or reported in a manner consistent with expenditure data on programs administered by the Department of Education. This omission is reflected in the Department's "Annual Program Plan," and results in an incomplete picture of statewide occupational education activities. The absence of comprehensive program expenditure data impedes the coordinating and planning efforts of the Board of Occupational Education. Because the Bureau has no administrative ties to the higher education institutions, duplication can be prevented only by coordinated action by the respective governing bodies of the institutions, the Council on Higher Education and the Board of Occupational Education. Although each body has established procedures to prevent duplication of new programs by the institutions under its direct control, together they have yet to implement a workable mechanism to prevent duplication of secondary programs and those offered by the community colleges and universities. Since the Board is responsible for reviewing all occupational program requests and the Council is responsible for all higher education programs, the Council and the Board need a mechanism for reviewing programs under their joint governance. However, the Council and the Board disagree over the point in the approval process at which the Board will review and approve new program requests. This disagreement between the two bodies has not been resolved and both parties have indicated the need for legislative action to clarify their relationship and powers.

Finally, manpower needs assessments for vocational education planning are sporadic and inconsistent. The only statewide data available is manpower demand estimates from the Kentucky Department of Labor. Local vocational facilities are carrying out independent efforts, but their results are not reported in a form that is useful for statewide planning. The Kentucky Occupational Information Coordinating Committee has been established to compile information gathered by the various agencies on state and local manpower needs as well as the total labor supply and available training opportunities. However, the committee is hampered in this task by the disparities and inadequacies of locally generated data.

FOOTNOTES

1. At present, there is no regular funding mechanism in Kentucky for preschool special education units. These may be funded only as experimental units at the discretion of the Superintendent of Public Instruction or with local funds by the district.
2. U. S. Department of Health, Education and Welfare, *Progress Toward a Free, Appropriate Public Education*, Washington: U. S. Government Printing Office, January, 1979, p. 160.
3. The State Board of Occupational Education was merged with the State Board for Elementary and Secondary Education on July 3, 1980, by Executive Order Number 80-528. The merged boards became the State Board of Education.
4. Kentucky State Department of Education, *Kentucky Elementary and Secondary School List and Classification, 1978-79*.
5. Kentucky State Department of Education, *Holding Power and Graduates*, May, 1978.
6. Urban Studies Center, *How Many Kentuckians: Population Forecasts 1970-2020*, (University of Louisville: November, 1977).
7. *Ibid.*
8. Robert C. Young, *Manpower Demand: Information Guidelines for Education, Vocation Education and Manpower Planning*, (Columbus, Ohio: The Center for Vocational and Technical Education, 1973), pp. 30-34. Hereafter referred to as *Manpower Demand*.
9. *Ibid.*, pp. 30-31.
10. Jean Pierre Jordaan and M. B. Hyde, *Vocational Maturity During the High School Years*, (New York: Teachers College Press, 1979) pp. 194-195.
11. Leonard A. Lecht, *Occupational Choices and Training Needs Prospects for the 1980s* (New York: Praeger Publishers, 1977), p. 20.
12. Kentucky State Department of Education, *Kentucky's Information for Training and Education System* (Frankfort, Kentucky: 1973).
13. Interview with Director, Division of Program Management, Bureau of Vocational Education, Kentucky State Department of Education, October 16, 1979.

14. *Ibid.*

15. Bureau of Vocational Education, Kentucky State Department of Education, *A Model to Facilitate Accountability*, p.3.

16. *Ibid.*, p. 3.

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APPENDIX A
OCCUPATIONAL PROGRAM ENROLLMENTS
COMMONWEALTH OF KENTUCKY
FY 1978

1978 TRAINING OPPORTUNITIES
RELATED TO
CURRENT AND FUTURE NEEDS FOR WORKERS

This section provides data which show the extent to which vocational education produced workers to meet the needs of the labor force. The actual outputs of the vocational education programs offered are compared to the projected outputs as planned for in the 1978 Plan and the projected demand for workers as identified by the Office of Employment Security's Labor Market Information System.

Table 1 presents projected and actual enrollments, projected and actual output (completers), and the estimated placements by each six-digit U.S. Office of Education program code. The table also provides these data by level (secondary, postsecondary, and adult) to illustrate the role and responsibility of each level in meeting the state's need for workers.

Table 2 presents the projected and actual allocations of funds by the six-digit U.S. Office of Education code to each type of institutional delivery system and level of training. This table shows to the best extent possible the actual use of state, local, and federal funds to meet the state's need for workers and the actual allocation among the various levels of training and the various types of delivery systems.

Table 3 presents the allocation of funds to eligible recipients as identified in the 1978 Annual Program Plan. The projected allocations represent the funds made available to each recipient based upon the criteria spelled out in P.L. 94-482 and described in the Distribution of Funds section, Part III, 1980 Annual Program Plan. The actual allocations are the actual amounts paid to the recipient to implement programs. These expenditures were made on the basis of an approvable plan and substantiating financial documents as submitted by each eligible recipient prior to the reimbursement of funds.

Table 4 provides data on the actual number of persons served by each recipient. These enrollments are provided by level within the four major legislative purposes: basic programs, program improvement programs, special programs for the disadvantaged, and consumer and homemaking programs.

Table 1

1978 TRAINING OPPORTUNITIES RELATED
TO CURRENT AND FUTURE NEED FOR WORKERS

Agribusiness Program Area	PROGRAM AND OE CODE	L E V E L	ENROLLMENTS		OUTPUT		TOTAL ANNUAL AVERAGE DEMAND FOR WORKERS	ESTIMATED PLACEMENT*			CONSIDERATIONS FOR PLANNING
			Projected	Actual	Projected (all levels)	Actual		Related Employment	Continuing Education	Other	
Agricultural Production	01.0100	S P/S A	3,000	3,193	925	1,774	680	1,118	302	354	Placement data indicate over-supply in this program is justified. Adult enrollment is in supplemental training
Agricultural Supplies/ Services	01.0200	S P/S A	110	61	35	27	150	27			This program has been identified as a priority program for expansion in the 1980 Plan.
Agricultural Mechanics	01.0300	S P/S A	1,000	1,001	325	352	60	250	49	53	Placement data indicate over-supply in this program is justified.
Agricultural Products	01.0400	S P/S A	25	19	14	6	N/A	3	1	2	
Ornamental Horticulture	01.0500	S P/S A	1,750	1,821	450	445	620	160	120	165	Output is consistent with occupational demand. Completion rate needs review.
Agricultural Resources	01.0600	S P/S A	50	66	20	15	50	12		3	
Forestry	01.0700	S P/S A	125	15	25	13	NA	13			Completion and placements are good, but demand data is currently unavailable.
Agribusiness I and II	01.9900	S P/S A	11,079	11,727	50	155	N/A	109	17	29	Agribusiness I and II are prerequisite courses to occupational preparation courses.
DAO, KEEP		S P/S A	210	93		24		17	2	5	

Table 1 (cont'd)

1978 TRAINING OPPORTUNITIES RELATED
TO CURRENT AND FUTURE NEED FOR WORKERS

Distributive Education Program Area PROGRAM AND OE CODE	L E V E L	ENROLLMENTS		OUTPUT		TOTAL ANNUAL AVERAGE DEMAND FOR WORKERS	ESTIMATED PLACEMENT*			CONSIDERATIONS FOR PLANNING
		Projected	Actual	Projected (all levels)	Actual		Related Employment	Continuing Education	Other	
Advertising Services 04.0100	S P/S A	28	25	31	17	240	10	6	1	Note - Based upon available data on student occupational objectives, the placement rate of students in distributive occupations is excellent. The distributive education program area is in the process of change from a generalized curriculum to a curriculum which directs a student toward a specific occupational objective. These changes will greatly facilitate the planning and operation of programs which will provide students the skills needed in the labor market.
Apparel and Accessories 04.0200	S P/S A	1,235	70	97	52	80	33	7	12	
Automotive 04.0300	S P/S A	852	80	56	63	30	40	10	13	
Finance and Credit 04.0400	S P/S A	36	25	30	19	580	11	8		
Floristry 04.0500	S P/S A	47	7	40	4	100	2		2	This program has been identified as a priority program for expansion in the 1980 Plan.
Food Distribution 04.0600	S P/S A	1,305	225	326	180	2,560	140	18	22	
Food Services 04.0700	S P/S A	1,135	482	253	88	480	84	44	4	
General Merchandise 04.0800	S P/S A	470	369	140	273		169	26	60	
Hardware, Building Materials 04.0900	S P/S A	4,471	140	39	116	6,150	74	2	16	This program has been identified as a priority program for expansion in the 1980 Plan.
		190	157		32		31		1	
		2,840	64		39	N/A	26		11	

Table 1 (cont'd)

1978 TRAINING OPPORTUNITIES RELATED
TO CURRENT AND FUTURE NEED FOR WORKERS

Distributive Education (cont'd) Program Area	L E V E L	ENROLLMENTS		OUTPUT (all levels)		TOTAL ANNUAL AVERAGE DEMAND FOR WORKERS	ESTIMATED PLACEMENT*			CONSIDERATIONS FOR PLANNING
		Projected	Actual	Projected	Actual		Related Employment	Continuing Education	Other	
PROGRAM AND OE CODE										
Home Furnishings	S P/S A	42	14	39	13	N/A	11		2	
Hotel and Lodging	S P/S A	41	20	16	8	600	5		3	
Industrial Marketing	S P/S A	20	23	8	16	370	12	1	3	
Insurance	S P/S A	9	3	7	2	220	1	1		
International Trade	S P/S A	6	1	3	1	N/A	1			
Personal Services	S P/S A	740	101	148	74	1,090	51	12	11	This program has been identified as a priority program for expansion in the 1980 Plan.
Petroleum	S P/S A	44	38	20	29	340	23		6	
Real Estate	S P/S A	12	4	123	4	710	3		1	
Recreation and Tourism	S P/S A	62	392	28	77	90	74	5	3	

Table 1 (cont'd)

1978 TRAINING OPPORTUNITIES RELATED
TO CURRENT AND FUTURE NEED FOR WORKERS

Health and Personal Services Program Area	L E V E	PROGRAM AND OE CODE	ENROLLMENTS		OUTPUT		TOTAL ANNUAL AVERAGE DEMAND FOR WORKERS	ESTIMATED PLACEMENT*			CONSIDERATIONS FOR PLANNING
			Projected	Actual	Projected (all levels)	Actual		Related Employment	Continuing Education	Other	
Dental Assistant	S P/S A	07.0101	70	57	60	8	150	8			This program is identified as a priority program for expansion in the 1980 Plan.
Dental Hygienist (Associate Degree)	S P/S A	07.0102					50				
Dental Laboratory Technology	S P/S A	07.0103					38				
Medical Laboratory Assistant	S P/S A	07.0203	12	12	10		360				Demand data indicates a review should be made to determine if expansion is warranted.
Medical Laboratory Technology	S P/S A	07.0299		21 14		7	N/A	4		3	
Nursing (Associate Degree)	S P/S A	07.0301	1,400	893 110	400	238	850	214	7	17	Actual output is less than projected in Plan. Review of enrollments and comple- ters is needed to determine level of output needed.
Practical Nurse	S P/S A	07.0302	12 920	984	300	281	2,500	259	8	14	This program is identified as a priority program for expansion in the 1980 Plan.
Nursing Assistant	S P/S A	07.0303	600	612	250	253	2,500	190	20	43	This program is identified as a priority program for expansion in the 1980 Plan.
Surgical Technician	S P/S A	07.0305	60	50	40	25	120	19	1	5	This program is identified as a priority program for expansion in the 1980 Plan.

Table 1 (cont'd)

1978 TRAINING OPPORTUNITIES RELATED
TO CURRENT AND FUTURE NEED FOR WORKERS

Health and Personal Services (cont'd) Program Area	PROGRAM AND OE CODE	L E V E L	ENROLLMENTS		OUTPUT		TOTAL ANNUAL AVERAGE DEMAND FOR WORKERS	ESTIMATED PLACEMENT*			CONSIDERATIONS FOR PLANNING
			Projected	Actual	Projected (all levels)	Actual		Related Employment	Continuing Education	Other	
Obstetrician Technology	07.0306	S P/S A					N/A				There is a need for more comprehensive occupational demand data in all technical occupational areas.
Other Nursing	07.0399	S P/S A	300	22			N/A				
Occupational Therapy	07.0401	S P/S A					N/A				
Physical Therapy	07.0402	S P/S A					N/A				
Other Rehabilitation	07.0499	S P/S A					N/A				
Radiologic Technology	07.0501	S P/S A	30	30	10	15	100	15			This program has been identified as a priority program for expansion in the 1980 Plan.
Nuclear Medical Technology	07.0503	S P/S A					N/A				
Other Radiologic	07.0599	S P/S A					N/A				
Ophthalmic	07.0600	S P/S A					N/A				

Table 1 (cont'd)

1978 TRAINING OPPORTUNITIES RELATED
TO CURRENT AND FUTURE NEED FOR WORKERS

Health and Personal Services (cont'd) Program Area	L E V E I	ENROLLMENTS		OUTPUT		TOTAL ANNUAL AVERAGE DEMAND FOR WORKERS	ESTIMATED PLACEMENT*			CONSIDERATIONS FOR PLANNING
		Projected	Actual	Projected (all levels)	Actual		Related Employment	Continuing Education	Other	
Environmental Health Technology 07.0700	S P/S A					N/A				
Mental Health Technology 07.0800	S P/S A					N/A				
Inhalation Therapy Technology 07.0903	S P/S A	30	32	20	15	150	13		2	This program has been identified as a priority program for expansion in the 1980 Plan.
Medical Assistant 07.0904	S P/S A	50	9 63	40	5 24	310	1 23	3 1	1	This program has been identified as a priority program for expansion in the 1980 Plan.
Health Aide 07.0906	S P/S A					N/A				
Emergency Medical Technician 07.0907	S P/S A	350	64	110		N/A				
Other (Health Careers, Medical Secretary, Ward Clerk) 07.9900	S P/S A	1,900 40	1,708 11 1,127	1,530	1,130 5 102	N/A	124 4 72	599 1 16	407 14	

Table 1 (cont'd)

1978 TRAINING OPPORTUNITIES RELATED
TO CURRENT AND FUTURE NEED FOR WORKERS

Home Economics Program Area	L E V E L	ENROLLMENTS		OUTPUT		TOTAL ANNUAL AVERAGE DEMAND FOR WORKERS	ESTIMATED PLACEMENT*			CONSIDERATIONS FOR PLANNING
		Projected	Actual	Projected (all levels)	Actual		Related Employment	Continuing Education	Other	
PROGRAM AND OE CODE										
Care and Guidance of Children 09.0201	S P/S A	720 515	653 415	98	247 7	930	62 7	79	106	
Clothing Management Production and Services 09.0202	S P/S A	360 270	139 359	88	35	1,100	4	20	11	Better placement data are needed on all these programs before expansion can be justified.
Food Management Production and Services 09.0203	S P/S A	520 900	973 827	128	289 38	370	95 29	107 5	87 4	
Home Furnishings Equipment and Services 09.0204	S P/S A	60 145	42 465	30	7	N/A	2	3	2	
Institutional and Home Management Services 09.0205	S P/S A	175 20	47 49	10		1,460				
Adult Homemaking Drop-In Center 09.0101	S P/S A	30,002 1,675 3,825	54,003 2,118 20,410			N/A				
	S P/S A									
	S P/S A									
	S P/S A									

Table 1 (cont'd)

1978 TRAINING OPPORTUNITIES RELATED
TO CURRENT AND FUTURE NEED FOR WORKERS

Business & Office Program Area	L E V E L	ENROLLMENTS		OUTPUT		TOTAL ANNUAL AVERAGE DEMAND FOR WORKERS	ESTIMATED PLACEMENT*			CONSIDERATIONS FOR PLANNING
		Projected	Actual	Projected (all levels)	Actual		Related Employment	Continuing Education	Other	
Accounting and Computing Occupations 14.0100	S P/S A	2,611 33 1,636	3,061 72 1,355	260	683 21 112	4,840	178 16 84	260 5 26	245 2	This program has been identified as a priority program for expansion in the 1980 Plan.
Data Processing 14.0200	S P/S A	160 59 365	200 3 410	251	41 1 140	1,030	23 1 118	7 1 1	11 21	This program has been identified as a priority program for expansion in the 1980 Plan.
Computer and Console Operators 14.0201	S P/S A					N/A				
Programmers 14.0203	S P/S A					N/A				
Other Business Data Processing 14.0299	S P/S A					N/A				
Clerical Occupations 14.0300	S P/S A	12,440 49 4,809	14,865 3,490	2,560	2,273 344	6,350	1,000 244	523 28	750 72	This program has been identified as a priority program for expansion in the 1980 Plan.
Information Communication Occupations 14.0400	S P/S A					N/A				
Materials Support Transportation 14.0500	S P/S A					N/A				
Personnel Training and Related 14.0600	S P/S A					N/A				

Table 1 (cont'd)

1978 TRAINING OPPORTUNITIES RELATED
TO CURRENT AND FUTURE NEED FOR WORKERS

Business & Office (cont'd) Program Area	L E V E L	ENROLLMENTS		OUTPUT		TOTAL ANNUAL AVERAGE DEMAND FOR WORKERS	ESTIMATED PLACEMENT*			CONSIDERATIONS FOR PLANNING
		Projected	Actual	Projected (all levels)	Actual		Related Employment	Continuing Education	Other	
PROGRAM AND OE CODE										
Steno/Secretarial and Related 14.0700	S P/S A	7,975 134 2,541	8,325 102 1,897	1,661	1,589 70 233	4,940	763 56 186	366 4 12	460 10 35	This program has been identified as a priority program for expansion in the 1980 Plan.
Administrative Management 14.0800	S P/S A					N/A				
Typing and Related Occupations 14.0900	S P/S A		10			N/A				
Other Business Occupations 14.9900	S P/S A		70 82		20 18	N/A	20 16		2	

Table 1 (cont'd)

1978 TRAINING OPPORTUNITIES RELATED
TO CURRENT AND FUTURE NEED FOR WORKERS

Technical Education Program Area PROGRAM AND OE CODE	L E V E L	ENROLLMENTS		OUTPUT		TOTAL ANNUAL AVERAGE DEMAND FOR WORKERS	ESTIMATED PLACEMENT*			CONSIDERATIONS FOR PLANNING
		Projected	Actual	Projected (all levels)	Actual		Related Employment	Continuing Education	Other	
Aeronautical Technology 16.0101	S P/S A					N/A				Note - More complete and comprehensive occupational demand data is needed in all technical occupational areas.
Architectural Technology 16.0103	S P/S A					N/A				
Automotive Technology 16.0104	S P/S A					N/A				
Chemical Technology 16.0105	S P/S A	18 4	15 4	10		240				This program has been identified as a priority program for expansion in the 1980 Plan.
Civil Technology 16.0106	S P/S A	39 131	23 96	14 19		N/A	17	1	1	
Electrical Technology 16.0107	S P/S A					80				
Electronic Technology 16.0108	S P/S A	95 603	163 459	110 83	21	260	16 71	2 2	3 10	This program has been identified as a priority program for expansion in the 1980 Plan.
Electromechanical Technology 16.0109	S P/S A					N/A				
Environmental Control Technology 16.0110	S P/S A					N/A				

Table 1 (cont'd)
1978 TRAINING OPPORTUNITIES RELATED
TO CURRENT AND FUTURE NEED FOR WORKERS

Technical Education (cont'd) Program Area PROGRAM AND OE CODE	L E V E L	ENROLLMENTS		OUTPUT		TOTAL ANNUAL AVERAGE DEMAND FOR WORKERS	ESTIMATED PLACEMENT*			CONSIDERATIONS FOR PLANNING
		Projected	Actual	Projected (all levels)	Actual		Related Employment	Continuing Education	Other	
Industrial Technology 16.0111	S P/S A					N/A				
Instrumental Technology 16.0112	S P/S A	30 45	17	5	3	N/A	2	1		
Mechanical Technology 16.0113	S P/S A	8 50	37	5	15	210	10		5	This program should be reviewed for possible expansion.
Metallurgical Technology 16.0114	S P/S A					N/A				
Scientific Data Processing 16.0117	S P/S A					120				
Commercial Pilot Training 16.0601	S P/S A					N/A				
Fire and Fire Safety Technology 16.0602	S P/S A					N/A				
Forestry Technology 16.0603	S P/S A					N/A				
Oceanographic Technology 16.0604	S P/S A					N/A				

Table 1 (cont'd)

Technical Education (cont'd) Program Area	L E V E I.	ENROLLMENTS		OUTPUT		TOTAL ANNUAL AVERAGE DEMAND FOR WORKERS	ESTIMATED PLACEMENT*			CONSIDERATIONS FOR PLANNING
				Projected (all levels)	Actual		Related Employment	Continuing Education	Other	
		Projected	Actual							
PROGRAM AND OE CODE										
Chemical Technology	S P/S A					N/A				
Other	S P/S A	32	6			N/A	5	1		
Air Pollution Technology	S P/S A	46	13			N/A	11		2	
Water and Waste Technology	S P/S A					N/A				

Table 1 (cont'd)

Industrial Education Program Area	PROGRAM AND OE CODE	L E V E L	ENROLLMENTS		OUTPUT		TOTAL ANNUAL AVERAGE DEMAND FOR WORKERS	ESTIMATED PLACEMENT*			CONSIDERATIONS FOR PLANNING
			Projected	Actual	Projected (all levels)	Actual		Related Employment	Continuing Education	Other	
Air Conditioning	17.0100	S	490	475	78	65	170	30	4	31	Output is consistent with occupa- tional demand.
		P/S A	523	536		44		39	5		
Appliance Repair	17.0200	S	243	157	31	13	120	7	2	4	Completion and placement rates need to be improved.
		P/S A	94	75		16		8	8		
Auto Body	17.0301	S	1,172	1,205	217	278	170	122	36	120	This program needs to be reviewed for possible decrease in output at the secondary level.
		P/S A	737	638		95		77	7	11	
Auto Mechanics	17.0302	S	3,456	3,383	639	768	1,230	461	77	230	Completion rate needs to be improved.
		P/S A	1,497	1,260		182		157	9	16	
Auto Parts	17.0303	S	61	77	17	18	N/A	12		6	
		P/S A	31	38							
Aviation Occupations	17.0400	S					N/A				
		P/S A									
Aircraft Maintenance	17.0401	S		35			N/A	10	1		
		P/S A		95		11					
Blueprint Reading	17.0500	S					N/A	13		3	
		P/S A		360		16		9			
Business Machines	17.0600	S	88	84	28	9	90	9			
		P/S A	54	35		10		1	2	7	

Table 1 (cont'd)

1978 TRAINING OPPORTUNITIES RELATED
TO CURRENT AND FUTURE NEED FOR WORKERS

Industrial Education (cont'd) Program Area	L E V E L	ENROLLMENTS		OUTPUT		TOTAL ANNUAL AVERAGE DEMAND FOR WORKERS	ESTIMATED PLACEMENT*			CONSIDERATIONS FOR PLANNING
		Projected	Actual	Projected (all levels)	Actual		Related Employment	Continuing Education	Other	
Commercial Art	S P/S A	176 44	133 12	18	28	160	8	16	4	This program has been identified as a priority program for expansion in the 1980 Plan.
Commercial Fishery Occupations	S P/S A					80				
Commercial Photography	S P/S A	13 37	64	1		220				This program has been identified as a priority program for expansion in the 1980 Plan.
Carpentry	S P/S A	2,009 993	2,152 878	434	530	880	292 156	53 7	185 21	This program has been identified as a priority program for expansion in the 1980 Plan.
Electricity	S P/S A	681 993	901 1,015	171	179 246	420	100 226	29 7	50 13	This program has been identified as a priority program for expansion in the 1980 Plan.
Heavy Equipment Operation	S P/S A		46	10	18	1,310	10	1	7	This program has been identified as a priority program for expansion in the 1980 Plan.
Masonry	S P/S A	238 252	349 234	30	96 20	130	45 15	13	38 5	Output of this program is consistent with occupational demand data.
Interior Finishing and Painting	S P/S A		24		4	510	2	1	1	
Plumbing and Pipefitting	S P/S A	76 272	67 276	13	63	390	6 63	2	5	This program has been identified as a priority program for expansion in the 1980 Plan.

Table 1 (cont'd)

1978 TRAINING OPPORTUNITIES RELATED
TO CURRENT AND FUTURE NEED FOR WORKERS

Industrial Education (cont'd) Program Area	L E V E L	ENROLLMENTS		OUTPUT		TOTAL ANNUAL AVERAGE DEMAND FOR WORKERS	ESTIMATED PLACEMENT*			CONSIDERATIONS FOR PLANNING
		Projected	Actual	Projected (all levels)	Actual		Related Employment	Continuing Education	Other	
PROGRAM AND OE CODE	L									
Other Construction Maintenance	S P/S A	59 1,305	245 133 719	71	28 107 197	810	28 100 185	1 4	6 8	This program has been identified as a priority program for expansion in the 1980 Plan.
Custodial Service	S P/S A	48 26	28	20	2	1,490			2	Occupational skills need to be reviewed to determine if short-term training is needed.
Diesel Mechanics	S P/S A	111 148	185 165	61	39 30	580	28 28	2	9 2	This program has been identified as a priority program for expansion in the 1980 Plan.
Drafting Occupations	S P/S A	1,124 691	1,102 516	285	207 120	230	70 102	56 2	81 16	This program should be reviewed to determine whether slight decrease is needed.
Electrical Occupations	S P/S A	1,289 614	1,146 718	338	249 104	530	87 88	52 2	110 14	This program has been identified as a priority program for expansion in the 1980 Plan.
Electronic Occupations	S P/S A	378 339	368 350	58	37 82	200	11 75	9	17	Completion rate at secondary level needs to be improved.
Fabric Maintenance Service	S P/S A		20	25	7	810	1	4	2	This program has been identified as a priority program for expansion in the 1980 Plan.
Dry Cleaning	S P/S A					150				
Foreman, Manager Occupations	S P/S A					N/A				

Table 1 (cont'd)

1978 TRAINING OPPORTUNITIES RELATED
TO CURRENT AND FUTURE NEED FOR WORKERS

Industrial Education (cont'd) Program Area	L E V E L	ENROLLMENTS		OUTPUT		TOTAL ANNUAL AVERAGE DEMAND FOR WORKERS	ESTIMATED PLACEMENT*			CONSIDERATIONS FOR PLANNING
		Projected	Actual	Projected (all levels)	Actual		Related Employment	Continuing Education	Other	
PROGRAM AND OE CODE										
Graphic Arts Occupations	S P/S A	307	304	58	49	160	30	11	8	Output is consistent with occupational demand.
Industrial Atomic Energy Occupations	S P/S A	241	237		45	100	34	2	9	
Instrument Mainte- nance and Repair Occupations	S P/S A					90				
Maritime Occupations	S P/S A					N/A				
Metal Working Occupations	S P/S A					460				The supply for these occupations is provided by programs listed below.
Machine Shop	S P/S A	987	1,107	272	255	220	138	43	74	Placement and demand data indicate that current level of output should be maintained.
Machine Tool Operation	S P/S A	1,031	944		158	540	144	2	12	
Sheet Metal	S P/S A	105	112	22	25	80	12		13	
Welding and Cutting	S P/S A	210	132		16	450	13		3	
		2,125	2,386	645	498		304	45	149	Placement and follow-up data indicate employment for these program completers is good.
		3,029	3,002		312		262	6	44	

Table 1 (cont'd)
1978 TRAINING OPPORTUNITIES RELATED
TO CURRENT AND FUTURE NEED FOR WORKERS

Industrial Education (cont'd) Program Area	L E V E L	ENROLLMENTS		OUTPUT		TOTAL ANNUAL AVERAGE DEMAND FOR WORKERS	ESTIMATED PLACEMENT*			CONSIDERATIONS FOR PLANNING
		Projected	Actual	Projected (all levels)	Actual		Related Employment	Continuing Education	Other	
Tool and Die Making	S P/S A		191	21	56	80	43		13	
Barbering	S P/S A	15	21	10	8	110			8	
Cosmetology	S P/S A	30	201	200	13	900	5		8	Cosmetology has been identified as a priority program for expansion in the 1980 Plan.
Other Personal Service	S P/S A	290	542		107	N/A	91	1	15	
Plastics Occupations	S P/S A					N/A				
Fireman Training	S P/S A	550	1,683			90				This training is provided in short- term upgrading programs.
Law Enforcement Training	S P/S A	138	55	138		30				This training is provided in short- term upgrading programs.
Other Public Services	S P/S A	433	15,434	433		20				Almost all the training in this pro- gram is supplemental.
Quantity Food Occupations	S P/S A	257		45	17	3,640	5		12	This program has been identified as a priority program for expansion in the 1980 Plan.

Table 1 (cont'd)
1978 TRAINING OPPORTUNITIES RELATED
TO CURRENT AND FUTURE NEED FOR WORKERS

Industrial Education (cont'd) Program Area PROGRAM AND OE CODE	L E V E L	ENROLLMENTS		OUTPUT		TOTAL ANNUAL AVERAGE DEMAND FOR WORKERS	ESTIMATED PLACEMENT*			CONSIDERATIONS FOR PLANNING
		Projected		Actual			Related Employment	Continuing Education	Other	
		Projected	Actual	Projected (all levels)	Actual					
Refrigeration 17.3000	S P/S A	52 338	16 267	7	7	N/A	6	1		
Small Engine Repair 17.3100	S P/S A	181 376	131 246	22	29 16	N/A	26 3		3 13	
Stationary Energy Sources Occupations 17.3200	S P/S A					130				
Textile Pro- duction and Fabrication 17.3300	S P/S A	203 96	82 85	28	23 7	2,670	8 4	9	6 3	This occupational area should be re- viewed for potential development of a special energy program. Textile production has been identified as a priority program for expansion in the 1980 Plan.
Leather Working 17.3400	S P/S A					60				
Upholstering 17.3500	S P/S A	35 88	19 46	16	2 4	40	1		1 4	
Woodworking Occupations 17.3600	S P/S A		12 296		4 6	80	2 3		2 3	
Cabinet Making 17.3601	S P/S A					100				
Woodworking Occupations 17.3699	S P/S A					N/A				

APPENDIX B
OCCUPATIONAL PROGRAM FOLLOW-UP REPORT
COMMONWEALTH OF KENTUCKY
FY 1978

ENROLLMENT, COMPLETIONS AND PLACEMENT OF VOCATIONAL
EDUCATION STUDENTS FOR 1977-78 SCHOOL YEAR
(POST SECONDARY)

PROGRAM	ENROLLMENT	COMPLETIONS	STATUS UNKNOWN	CONTINUING EDUCATION	OTHER REASONS	EMPLOYED FULL-TIME RELATED	UNEMPLOYED	OTHER EMPLOYMENT
013000 Agricultural Mechanics	19	8/42%		2/25%		6/75%		
TOTAL AGRIBUSINESS	19	8/42%		2/25%		6/75%		
042000 Retailing	49	13/27%	3/23%			10/77%		
TOTAL DISTRIBUTIVE ED.	49	13/27%	3/23%			10/77%		
070299 Medical Lab. Tech. Other	21	14/67%		2/14%		12/86%		
170301 Registered Nurse	89	324/36%	5/1%	1/5%		315/97%	2/1%	1/5%
079900 Medical Secretary	11	5/64%	1/20%	1/20%		3/60%		
079900 Other		2		1/50%		1/50%		
TOTAL HEALTH	925	345/37%	6/2%	5/1%		331/96%	2/7%	1/3%
140100 Acct. Jr. Management	72	43/60%		11/26%		32/74%		
140100 Data Processing	3	2/67%	1/50%	1/50%				
140700 Secretarial	102	69/68%		9/13%	1/1%	58/85%		1/1%
TOTAL BUSINESS & OFFICE	177	114/64%	1/1%	21/18%	1/1%	90/79%		1/1%

Page Two		Post Secondary (Cont.)						
PROGRAM	ENROLLMENT	COMPLETIONS	STATUS UNKNOWN	CONTINUING EDUCATION	OTHER REASONS	EMPLOYED FULL-TIME RELATED	UNEMPLOYED	OTHER EMPLOYMENT
171300 Drafting	1,102	226/21%	6/3%	60/57%	5/2%	84/37%	11/5%	60/26%
171401 Industrial Electricity	1,146	291/25%	10/6%	86/30%	10/3%	83/29%	15/5%	79/27%
171503 Radio and TV Repair	368	73/20%	7/10%	20/27%	3/4%	31/43%	1/1%	11/15%
171601 Dry Cleaning	20	5/25%		1/20%		3/60%		1/20%
171900 Graphic Arts	304	50/16%	4/8%	4/8%		38/76%	1/2%	3/6 %
172302 Machine Shop	1,107	305/28%	18/6%	22/7%	4/1%	176/58%	19/6%	66/22%
172305 Sheet Metal	112	29/26%				21/72%		8/28%
172306 Welding	2,386	667/28%	44/8%	70/10%	18/3%	350/52%	42/6%	143/21%
172602 Cosmetology	201	13/6%	3/23%	4/31%			1/8%	5/38%
173100 Small Engine Repair	131	52/40%	4/8%	13/25%	2/4%	28/54%		5/9 %
173300 Textile Prod. & Fabric	82	6/23%		2/33%			2/33%	2/34%
173302 Tailoring		13/		2/15%		3/23%	4/31%	4/31%
173500 Upholstering	19	1/5%				1/100%		
173601 Cabinet Making	12	4/3%				4/100%		
179900 Other	24	9/30%				9/100%		
TOTAL INDUSTRIAL EDUCATION	16,514	4,133/25%	244/6%	549/13%	116/3%	2,028/49%	231/6%	365/23%

ENROLLMENT, COMPLETIONS AND PLACEMENT OF VOCATIONAL
EDUCATION STUDENTS FOR 1977-78 SCHOOL YEAR.
(Secondary)

PROGRAM	ENROLLMENT	COMPLETIONS	STATUS UNKNOWN	CONTINUING EDUCATION	OTHER REASONS	EMPLOYED FULL-TIME RELATED	UNEMPLOYED	OTHER EMPLOYMENT
010100 Ag. Production	3,193	1,251/39%	47/3%	254/20%	19/2%	702/56%	19/2%	210/12%
010200 Ag. Supplies/Services	61	37/61%	2/5%	4/11%	1/3%	26/70%		4/11%
010300 Ag. Mechanics	1,001	546/55%	10/2%	111/21%	12/2%	311/57%	13/2%	89/10%
010500 Horticulture	1,021	503/20%	40/9%	125/25%	25/5%	159/32%	26/5%	122/24%
010600 Ag. Resources	66	18/27%	2/11%	4/22%	1/6%	8/44%	1/6%	2/11%
010700 Forestry	15	13/87%		7/54%		3/23%		3/23%
010900 Other	11,727	27 } 1/2%		7/26%		14/52%		6/22%
019900 Other		152	4/3%	20/13%	9/6%	90/59%		29/18%
TOTAL AGRIBUSINESS	17,804	2,547/14%	113/4%	532/21%	67/3%	1,313/52%	57/2%	465/18%
040100 Advertising Services	25	7/28%		1/14%	2/29%	4/57%		
040200 Apparel-Accessories	70	39/56%	1/3%	14/36%	1/3%	17/43%	6/15%	
040300 Automotive	80	24/30%	1/4%	5/21%		12/50%	1/4%	5/21%
040400 Finance & Credit	25	11/44%		3/21%		7/64%		1/9%
040500 Floristry	7	1/14%		1/100%				
040600 Food Distribution	225	75/33%	1/1%	13/17%	3/4%	52/70%	2/3%	4/5%
040700 Food Services	369	157/43%	5/3%	33/21%	7/4%	95/61%	4/3%	13/8%
040800 General Merchandise	140	48/34%	1/2%	3/6%	6/13%	34/71%	3/6%	1/2%

Page Two		Secondary (Cont.)						
PROGRAM	ENROLLMENT	COMPLETIONS	STATUS UNKNOWN	CONTINUING EDUCATION	OTHER REASONS	EMPLOYED FULL-TIME RELATED	UNEEMPLOYED	OTHER EMPLOYMENT
040900 Hardware Supplies/Equip.	64	20/31%	1/5%	1/5%		16/80%		2/10%
041000 Home Furnishings	14	3/21%		1/33%				1/34%
041100 Hotel & Lodging	20	5/25%		1/20%	1/20%	3/60%		
041200 Industrial Marketing	23	3/13%		1/33%		2/67%		
041500 Personal Services	101	67/67%		10/21%	6/13%	29/62%	1/2%	1/2 %
041600 Petroleum	38	11/29%		2/18%	1/9%	7/64%		1/9 %
041700 Real Estate	4	1/25%						1/10%
041800 Recreation & Tourism	20	7/35%	1/16%	2/29%		4/57%		
041900 Transportation	9	2/22%				1/50%	1/50%	
042000 Retailing	552	167/30%	19/11%	42/25%	9/6%	78/47%	7/4%	12/7 %
043100 Wholesaling	17	5/29%		2/40%		1/20%		2/40%
049500 D. E. I	7,645	58		8/14%	17/29%	25/43%	1/2%	7/12%
049600 D.E. II		79		8/10%	4/5%	63/80%	4/5%	
049700 D.E. III		1,023	53/5%	198/19%	67/7%	604/59%	20/2%	81/8 %
049900 D.E. Other		42	1/2%	6/15%	3/7%	29/69%	2/5%	1/2 %
TOTAL DISTRIBUTION		1,835/19%	84/4%	355/19%	167/9%	1,083/59%	53/2%	133/7 %
079800 Medical Secretary	cont.	1	1/100%					
089900 Health Other		939	72/8%	536/57%	79/9%	117/12%	10/2%	117/12%

Secondary (Cont.)

PROGRAM	ENROLLMENT	COMPLETIONS	STATUS UNKNOWN	CONTINUING EDUCATION	OTHER REASONS	EMPLOYED FULL-TIME RELATED	UNEMPLOYED	OTHER EMPLOYMENT
079901 Health Careers	1,708	198 / 67%	9/5%	111/56%	10/5%	38/19%	10/5%	20/16%
079904 Related Health		2				2/100%		
TOTAL HEALTH	1,708	1,140/67%	82/7%	647/57%	89/8%	157/14%	28/2%	137/12%
090201 Child Care	653	250/38%	12/5%	89/36%	19/8%	60/24%	29/11%	41/10%
090202 Clothing Service	139	30/22%	2/7%	10/33%	6/20%	5/17%	1/3%	6/20%
090203 Food Service	973	312/32%	20/6%	96/31%	23/7%	114/37%	21/7%	38/12%
090204 Home Furnishing	62	17/40%	2/12%	6/35%	2/12%	3/10%	3/10%	1/5%
090205 Home Community Services	67	2/4%				2/100%		
TOTAL HEALTH	1,854	611/33%	36/6%	201/33%	50/8%	104/30%	54/9%	86/14%
140100 Acct. Jr. Management	3,061	698/23%	87/12%	240/34%	19/3%	253/36%	30/4%	69/11%
140200 Data Processing	200	40/20%		9/22%	1/3%	18/45%	4/10%	3/20%
140300 Clerical	14,865	2,449/16%	178/7%	358/23%	104/8%	1,060/43%	226/9%	235/10%
140700 Secretarial	8,325	1,670/20%	91/5%	411/25%	102/6%	877/53%	54/3%	129/8%
149900 Other	70	18/26%	1/6%	10/55%	4/22%	2/11%		1/10%
TOTAL BUSINESS & OFFICE	26,521	4,875/18%	357/7%	1,234/25%	310/6%	2,218/46%	314/7%	442/9%
160105 Chemical Technology	15	8/53%			1/13%			7/8%
160106 Highway Technology	23	4/17%		1/25%		2/50%		1/2%

ENROLLMENT, COMPLETIONS AND PLACEMENT OF VOCATIONAL
EDUCATION STUDENTS FOR 1977-78 SCHOOL YEAR
(ADULT)

PROGRAM	ENROLLMENT	COMPLETIONS	STATUS UNKNOWN	CONTINUING EDUCATION	OTHER REASONS	EMPLOYED FULL-TIME RELATED	UNEMPLOYED	OTHER EMPLOYMENT
010500 Horticulture	32	8/25%				8/100		
010900 Other Ag.	46	24/52%		2/8%		18/75%		4/17%
TOTAL AGRIBUSINESS	78	32/41%		2/6%		26/81%		4/13%
040800 General Merchandise	69	65/94%	11/17%	4/6%	10/15%	29/45%		11/17%
040600 Food Distribution	371	310/84%	182/59%	1/1%	20/6%	50/16%	19/6%	38/12%
041700 Real Estate	185	93/50%	56/60%		1/1%	13/14%	1/1%	22/24%
049900 D. E. Other	10	6/60%	4/67%					2/33%
TOTAL DISTRIBUTIVE ED.	635	474/75%	253/53%	5/1%	31/7%	92/19%	20/4%	73/16%
070101 Dental Assistant	57	27/47%	5/19%	2/7%		20/74%		
070203 Certified Lab. Assistant	12	6/50%				6/100%		
070302 Licensed Practical Nurse	779	440/56%	19/4%	9/2%	7/1%	396/90%	2/1%	7/2 %
070303 Nurse Assistant	358	239/67%	14/6%	9/3%	14/6%	191/80%	5/2%	6/3 %
070305 Surgical Technician	50	22/44%	3/14%	3/14%		14/63%		2/9 %
070501 Radiology Technician	30	15/50%	1/7%	1/7%		13/86%		
070903 Respiratory Therapy	18	15/83%		2/13%		13/87%		
070904 Medical Assistant	63	37/59%	1/3%	1/3%		35/94%		

PROGRAM	ENROLLMENT	COMPLETIONS	STATUS UNKNOWN	CONTINUING EDUCATION	OTHER REASONS	EMPLOYED FULL-TIME RELATED	UNEMPLOYED	OTHER EMPLOYMENT
160108 Electronics Technology	163	43/26%	8/19%	9/21%	3/7%	14/32%		9/21%
TOTAL TECHNOLOGY	201	55/27%	8/15%	10/18%	4/7%	16/29%		17/31%
170100 Air Conditioning	475	82/17%	3/4%	5/6%	1/1%	54/66%	6/7%	13/16%
170200 Appliance Repair	157	16/10%		2/13%		9/56%		5/31%
170301 Auto Body	1,205	306/25%	20/7%	35/11%	16/5%	114/37%	29/10%	92/30%
170302 Auto Mechanics	3,383	899/27%	46/5%	99/11%	19/2%	484/54%	45/5%	206/23%
170303 Auto Parts	77	4/21%	2/50%			1/25%	1/25%	
170399 Service Station Att.		12	1/8%			8/67%	1/8%	2/17%
170401 Aircraft Maintenance	35	1/3%				1/100%		
170600 Office Machine Repair	84	7/8%	1/14%	2/29%		3/43%		1/14%
170700 Commercial Art	133	23/17%	5/22%	7/30%	2/9%	5/22%		4/17%
171001 Carpentry	2,152	580/27%	35/6%	54/9%	18/3%	306/54%	37/6%	130/22%
171002 Electricity	901	230/26%	9/4%	46/20%	11/5%	92/40%	5/2%	67/29%
171004 Masonry	369	107/31%	13/12%	10/9%	4/4%	51/48%	3/3%	26/24%
171005 Painting & Decorating	269	3/21%				1/33%		2/67%
171093 Mine Maintenance		54	3/6%	3/6%	2/4%	26/40%	5/9%	15/27%
171007 Plumbing	67	12/18%	1/8%			7/59%		4/33%
171100 Custodial Training	28	5/18%			1/20%	2/40%		2/40%
171200 Diesel Mechanics	185	48/26%	1/2%	2/4%		33/69%	3/6%	9/19%

PROGRAM	ENROLLMENT	COMPLETIONS	STATUS UNKNOWN	CONTINUING EDUCATION	OTHER REASONS	EMPLOYED FULL-TIME RELATED	UNEMPLOYED	OTHER EMPLOYMENT
079800 Medical Secretary	167	17	6/35%			9/53%		2/12%
079900 Other		49	4/8%	6/12%	4/0%	24/49%	2/4%	9/19%
079901 Health Careers		3			1/33%	2/67%		
079905 Medical Records		13				13/100%		
TOTAL HEALTH	1,534	883/58%	53/6%	33/4%	26/3%	736/83%	9/1%	26/3%
090201 Child Care	19	2/11%				2/100%		
090203 Food Service	140	37/26%	2/5%			32/87%		3/8%
TOTAL HOME ECONOMICS	159	39/25%	2/5%			34/87%		3/8%
140100 Acct. Jr. Management	219	74/34%	4/5%			42/57%	20/27%	8/11%
140200 Data Processing	382	204/53%	51/25%	18/9%	2/1%	85/42%	12/6%	36/17%
140300 Clerical	1,214	452/37%	95/21%	12/3%	28/6%	233/52%	37/8%	47/10%
140700 Secretarial	656	247/38%	8/3%	4/1%	15/6%	182/74%	24/10%	14/6%
149900 Other	52	4/8%				4/100%		
TOTAL BUSINESS & OFFICE	2,553	981/38%	158/16%	34/3%	45/5%	546/56%	93/9%	105/11%
160105 Chemical Technology	4	4/100%		1/25%				3/75%
160106 Highway Technology	96	30/31%	2/7%			28/93%		
160108 Electronics Technology	459	81/18%	2/2%	1/1%		61/76%	4/5%	13/16%
160112 Instrumentations	17	1/6%				1/100%		

Adult (Cont.)

OTHER	ENROLLMENT	COMPLETIONS	STATUS UNKNOWN	CONTINUING EDUCATION	OTHER REASONS	EMPLOYED FULL-TIME RELATED	UNEMPLOYED	OTHER EMPLOYMENT
160113								
Technical Drafting	37	19/51%		2/11%		16/84%		1/5 %
169000								
Communication Tech.	46	21/46%	1/5%			19/90%		1/5 %
TOTAL TECHNOLOGY	659	156/24%	5/3%	4/2%		125/81%	4/2%	18/12%
170100								
Air Conditioning	251	49/20%			2/4%	45/92%		2/4 %
170200								
Appliance Repair	53	19/36%	1/5%	1/5%	1/5%	12/64%		4/21%
170300								
Auto Body	402	127/32%	9/7%	6/5%	3/2%	97/76%	7/6%	5/4 %
170302								
Auto Mechanics	816	206/25%	3/2%	13/6%	2/1%	170/83%		18/9 %
170401								
Aircraft Maintenance	95	40/42%		2/5%		37/93%		1/3 %
170500								
Blueprint Reading	40	16/40%	7/44%			9/56%		
170600								
Office Machine Repair	35	13/37%	1/8%			8/62%	2/15%	2/15%
170700								
Commercial Art	12	6/50%				6/100%		
171001								
Carpentry	635	295/46%	15/5%	20/6%	1/1%	245/83%	2/1%	12/4 %
171002								
Electricity	751	420/56%	66/16%	39/9%	1/1%	296/70%		18/4 %
171004								
Masonry	156	51/33%	1/2%		2/4%	48/94%		
171007								
Plumbing	132	104/79%	10/17%	15/14%	2/2%	62/60%	7/7%	
171099								
Const. & Maint., Other	549	216/39%	20/9%	15/7%	1/1%	175/81%		5/2 %
171200								
Diesel Mechanic	140	41/29%		1/2%		39/96%		1/2 %
171300								
Drafting	491	143/29%	6/4%	6/4%	3/2%	116/83%	1/1%	9/6 %
171401								
Industrial Electricity	374	148/40%	6/4%	6/4%		130/88%	1/1%	5/3 %

PROGRAM	ENROLLMENT	COMPLETIONS	STATUS UNKNOWN	CONTINUING EDUCATION	OTHER REASONS	EMPLOYED FULL-TIME RELATED	UNEMPLOYED	OTHER EMPLOYMENT
171501 Communication	218	92/42%	3/3%	1/1%		87/95%		1/2 %
171900 Graphic Arts	189	55/29%	6/11%	1/2%	2/4%	43/70%		3/5 %
172302 Machine Shop	548	255/47%	4/2%	25/9%		217/85%	4/2%	5/2 %
172305 Sheet Metal	77	65/84%	4/6%			60/92%		1/2 %
172306 Welding	1,061	475/45%	13/2%	28/6%	7/2%	391/82%	7/2%	29/6 %
172307 Tool & Die	191	170/89%	24/14%		1/1%	143/84%		2/7 %
172602 Cosmetology	542	174/32%	8/5%		5/3%	148/85%	2/1%	11/6 %
172903 Hair Cutting	46	18/39%	13/72%			1/6%		4/22%
173100 Small Engine Repair	86	23/27%	2/8%		11/48%	5/22%		5/22%
173500 Upholstering	46	12/26%		2/17%	5/41%	3/25%		2/17%
173601 Cabinet Making	41	13/32%				13/100%		
179900 Other	26	6/23%	6/100%					
TOTAL INDUSTRIAL EDUCATION	8,003	3,250/41%	236/7%	181/6%	49/2%	2,606/80%	33/1%	145/4 %

APPENDIX C
NEW OCCUPATIONAL PROGRAM REVIEW PROGRAM
PROPOSED BY COUNCIL ON HIGHER EDUCATION
FOR INSTITUTIONS OF HIGHER EDUCATION
FY 1979

RECEIVED NOV 07 1979

Rationale for and Steps Used in
Program Approval

KRS Chapter 164 gives the Council on Higher Education the responsibility and authority to define and approve all degree programs offered at the public universities and community colleges. In the review and approval of programs many factors are considered such as appropriateness to the institutional mission, capability of the institution to offer the program, programs of the same or similar type at a nearby institution, financial resources available and probably the most important element need for the program. Need for the program as considered by the CHE is done so in at least two ways - the manpower needs of the region/state and the potential number of students interested in enrolling in the program. The review process by the CHE is lengthy and very comprehensive. The time required to complete this process through the appropriate institutional faculty and administrative committees, the university governing board, and Council on Higher Education can, and, for the most part, does take several months, oftentimes in excess of 18 months. This delay in allowing the institution to implement a program can cause undue hardship on students but of particular concern is that the state/regional manpower need goes unmet for this period of time.

The Council on Higher Education will adhere to the following procedures in securing from the Board a review of new occupational programs originating in institutions of higher education including community colleges:

PROCEDURES FOR REVIEW OF OCCUPATIONAL
PROGRAMS

Recommendation

That the Council approve the following procedures to be used in submitting previously agreed upon two-year associate degree programs to the State Board for Occupational Education for their review based on need.

Proposed Programs

1. The institution will submit formal proposals, using CHE approved format, to the CHE for the initiation of new occupational type programs.
2. The staff periodically will compile a list of all new program requests received by the Council.
3. Council staff will forward copies of requests for programs requiring review by the Board to the Board for review based on need.
4. Pursuant to KRS 156.116 the CHE staff will resolve any questions which might arise from either the Board staff or Board regarding proposed programs.
5. The Secretary for the State Board for Occupational Education will notify the Council of action taken by the Board on program proposals.
6. The Council on Higher Education will notify the institution of higher education which submitted the proposal of its action and will provide a copy of the notification to the Secretary of the Board.
7. With the exchange of information and recommendations and the coordination provided by the Deputy Superintendent and the Deputy Executive Director, the review process can be completed with a full exchange of information and with no inordinate time loss to the institutions.

Existing Programs

Programs of a vocational/occupational/technical nature offered by the community colleges and universities which are subject to review by the State Board for Occupational Education will be submitted annually by the Council on Higher Education. The staff of the Council on Higher Education will present to the staff of the Occupational Board data regarding existing programs

60 days prior to the Board meeting at which approval of the Board is to be requested. All programs will be reviewed prior to the beginning of each fiscal year.

The format presented by the Council on Higher Education to the Occupational Board will include the institution name, program title, options, degree level, HEGIS category, brief program description, enrollment for current and three previous years, degrees conferred for three previous years, competencies expected of graduates/completers and placements. The staff of the Occupational Board may request additional information from the staff of the Council on Higher Education as needed to determine if the need for the program continues to exist or if the program is in duplication with a similar program at another public institution.

Background

In May 1977 Governor Carroll issued Executive Order 77-453 creating the Board for Occupational Education. This Executive Order later became part of Senate Bill 289 which was passed by the 1978 General Assembly and signed by the Governor. In addition to other responsibilities the Executive Order and subsequent legislation authorized the Board for Occupational Education to review requests from the Council on Higher Education for new and existing associate degree occupational programs to be offered by the public institutions of higher education. The Board for Occupational Education is to review such requests and on the basis of need for the program to make recommendations to the CHE regarding continuance or implementation.

For several months the staffs of the Board and Council have been meeting in an attempt to develop the procedures for the Board's review. The staffs have been unable to agree upon the procedures relative to the final review authority. The Board has insisted that final review authority rests with the Board and that it will not take official action on a proposed program until the Council has reviewed and approved the proposed program. On March 6, 1979, the Board ratified their position with approval of the attached guidelines and procedures for review of proposed and existing programs in institutions of higher education.

APPENDIX D
NEW OCCUPATIONAL PROGRAM REVIEW PROCEDURE
PROPOSED BY BOARD FOR OCCUPATIONAL EDUCATION
FOR INSTITUTIONS OF HIGHER EDUCATION
COMMONWEALTH OF KENTUCKY
FY 1979

PROCEDURES FOR REVIEWING NEW OCCUPATIONAL PROGRAMS
ORIGINATING IN INSTITUTIONS OF HIGHER EDUCATION

Proposals for new programs of a vocational/occupational/technical nature offered by the community colleges and universities which are subject to the approval of the State Board for Occupational Education will be submitted by the Council on Higher Education. In order to minimize the time frame for this review process, a concurrent or joint review using the Council proposal format will be conducted by designated staff members of the Board and the Council. The review by the staff of the State Board will focus on the need for the proposed programs and the avoidance of duplication with other programs offered in public institutions.

- 1) Information pertaining to proposed programs will be provided to the staff of the Board by the Council on Higher Education no later than 90 days prior to the Board meeting at which approval by the Board is to be requested.
- 2) During the review, the respective staff members will share findings and exchange information relating to program proposals under review and will attempt to resolve any differences of opinion which may affect their recommendations. While a cooperative review will be conducted, representatives of the Board and the Council will develop independent recommendations.
- 3) The Deputy Superintendent for Occupational Education and the Deputy Executive Director for Academic Affairs

will exchange recommendations and coordinate the final review process.

- 4) Program proposals will be considered by the State Board for Occupational Education following approval of the program by the Council on Higher Education. Every effort will be made by the Board to take action on the proposal as soon as possible after approval by the Council.
- 5) The Secretary for the State Board for Occupational Education will notify the Council of action taken by the Board on program proposals.
- 6) The Council on Higher Education will notify the institution of higher education which submitted the proposal of the action and will provide a copy of the notification to the Secretary of the Board.
- 7) With the exchange of information and recommendations and the coordination provided by the Deputy Superintendent and the Deputy Executive Director, the review process can be completed with a full exchange of information and with no inordinate time loss to the institutions.

(Retyped from a copy of the original.)

